2014   VERTICALITY - LIGHTING

PETZL®

Progressing, working

Since 1968, Petzl's mission has remained constant: to design tools that allow people to progress in vertical or dark environments. Our approach is based on the search for appropriate and efficient solutions for specific situations and on the continual improvement of these solutions. This is done with all our users in mind: rope specialists, workers at height, arborists, rescue workers, electricians, artisans, etc..
For professional PPE (Personal Protective Equipment), as for all Petzl products, comfort, ergonomics and durability are the priority. Innovation is at the heart of this process.

Experience

For professionals, the reliability and quality of their equipment are essential. At Petzl, this concern is expressed throughout the product's lifetime, from the research phase to after-sales service. At each stage of development and manufacturing, products undergo numerous tests and inspections in the lab, in the field, and on the production line.

During the R&D phase, the research team works closely with Petzl's testing lab to ensure optimal usage, with maximum safety for the user. Since 2011, our production process goes further in ensuring the reliability of our products, with the implementation of automated inspection operations that complement our manual inspections: cameras, foolproof systems, etc.. Finally, all PPE products and headlamps are individually inspected.

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

Sharing

A product is not complete without the technical information associated with its correct use. For many years, Petzl has produced technical drawings and videos that explain the use of our products and detail the technical situations encountered in the field. These have become a body of reference for all things related to work at height and are available through all our communications: catalogs, website, instructions, packaging. Our goal is to allow our clients to perform in their professions with maximum efficiency and safety.
Today, going ever further, Petzl is developing training modules that provide information on vertical equipment and its use, offering training workshops through our Solutions/Training network.

We hope you enjoy this 2014 catalog.

Paul Petzl

Techniques

Products

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

• Gaining an adequate apprenticeship in 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 his 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 in relation to the anchor:**

When the worker moves above his anchor, the severity of the potential fall increases. The fall factor concept is sometimes used to describe the position of the worker in relation 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 length of a fall and the position of the worker in relation to the anchor.

Anticipating 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 urgent treatment. Work teams must be equipped and trained to quickly evacuate an injured team member.

• **Evacuating a patient without assistance:**

Procedures for evacuating workers should be determined whenever a new work site 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 himself alone at height, but at least one person trained in evacuations should be present and equipped on site.

1. 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.
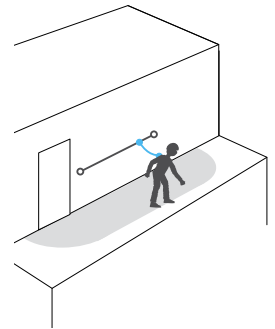
2. Work positioning

A work positioning system supports the user and allows him to position himself precisely, supported or suspended. This system is not designed to arrest a fall; the user must be under tension on his positioning system.

The work positioning system must be completed with a fall arrest system.
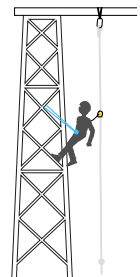
3. Fall arrest

The fall arrest system is a belay system that is independent of the progression or work positioning system, connected to the A (fall arrest) attachment point of the harness.

The fall arrest system doesn't prevent a free fall. Its role is to arrest it while limiting the impact force experienced by the user. It must therefore be used with enough clearance to allow for a free fall.
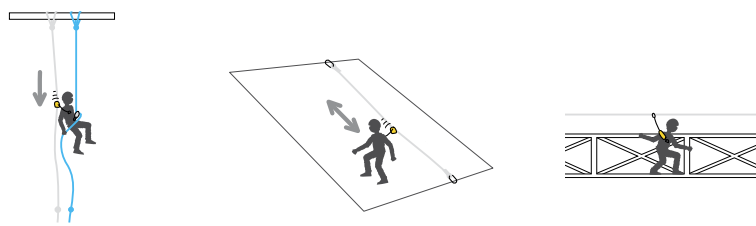
• **Limiting the impact force: absorption of the energy of a fall:**
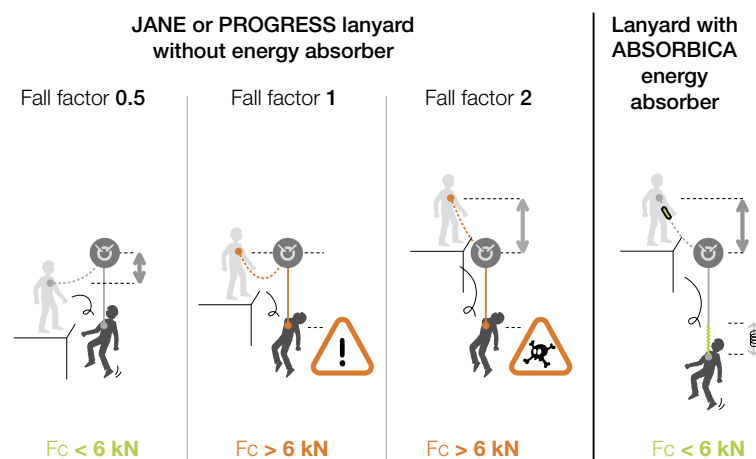
A fall arrest system must ensure that the impact force experienced by the user is no more than 6 kN.

A fall arrest system usually has an energy absorber. It is designed to limit the impact force for a predefined maximum fall length, under the conditions specified in its Instructions for Use.

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

A sling lanyard or 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 energy absorber

| Fall factor **0.5**	Fall factor **1**	Fall factor **2**	
Fc **< 6 kN**	Fc **> 6 kN**	Fc **> 6 kN**	Fc **< 6 kN**

• **Distance for fall arrest and clearance:**

Clearance is the minimum amount of clear space below a fall arrest system that prevents the user from contacting any obstacle in case of a fall.

The required height varies with the system employed (energy-absorbing lanyard, mobile fall arrester, etc.), with the user's weight, and with his initial position in relation to the anchor.

Clearance takes into account:
- The stopping distance of the mobile devices or the length of the lanyard (A)
- The tearing length of the energy absorber (B)
- The average height of the user (C)
- A safety margin (D)
- The potential elongation of the support (rope stretch) (E)

A clearance estimate is proposed in the Instructions for Use for each device.

Clearance

Clearance
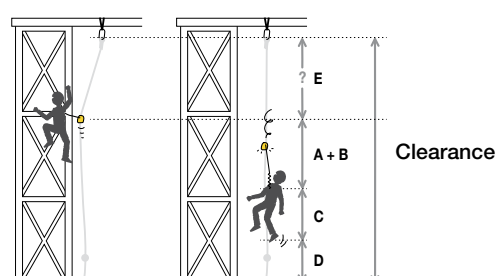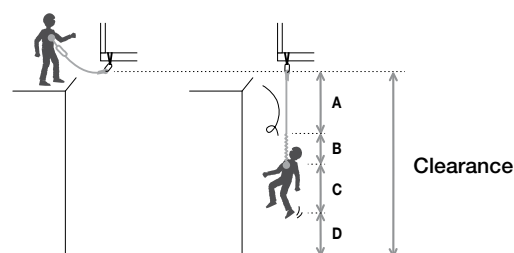
Groupe F, Pont du Gard, France © Lafouche

Difficult access

This progression technique is used when there is no collective protection, or when dealing with overhanging structures, or structures that are incompatible with other methods. This is also the case for temporary operations where it is not practical to set up collective protection. The work area is accessed with ropes by specialized workers with training in difficult-access techniques. This can be done from the top (safer and simpler to set up), or from below (for example, a leader throws a rope up and around a fixed point, and then climbs up the rope, or uses mountain climbing progression techniques).

Confined spaces

Work done in confined spaces carries specific additional difficulties related primarily to the lack of space and to the lack of means of autonomous progression.

ASAP® LOCK

The ASAP LOCK has an integrated locking function that allows the user to immobilize the device to reduce the length of a fall. This function can also be used in very windy conditions to keep the rope from being blown upwards. This system is also undroppable when passing intermediate anchors.

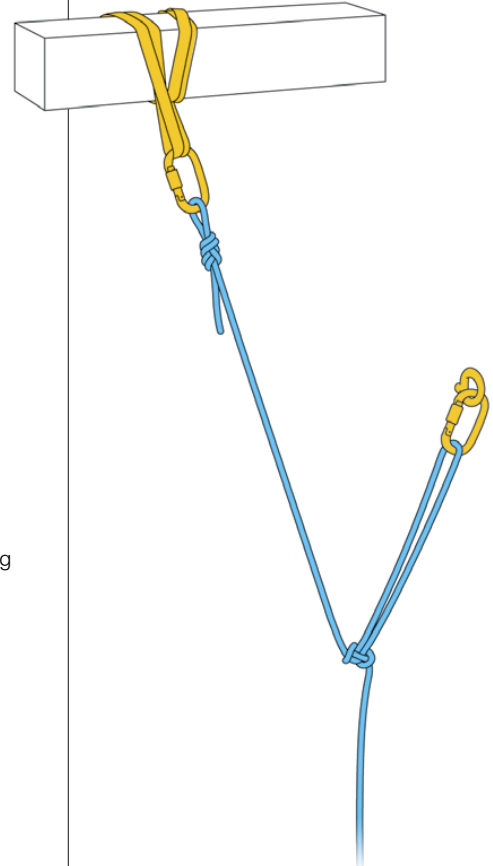**NEW 2014**

VERTICALITY

1. Installing ropes

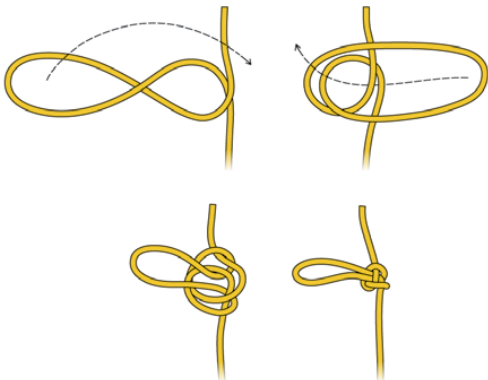Load-sharing anchors with the rope

Bunny knot (for load-sharing anchors)
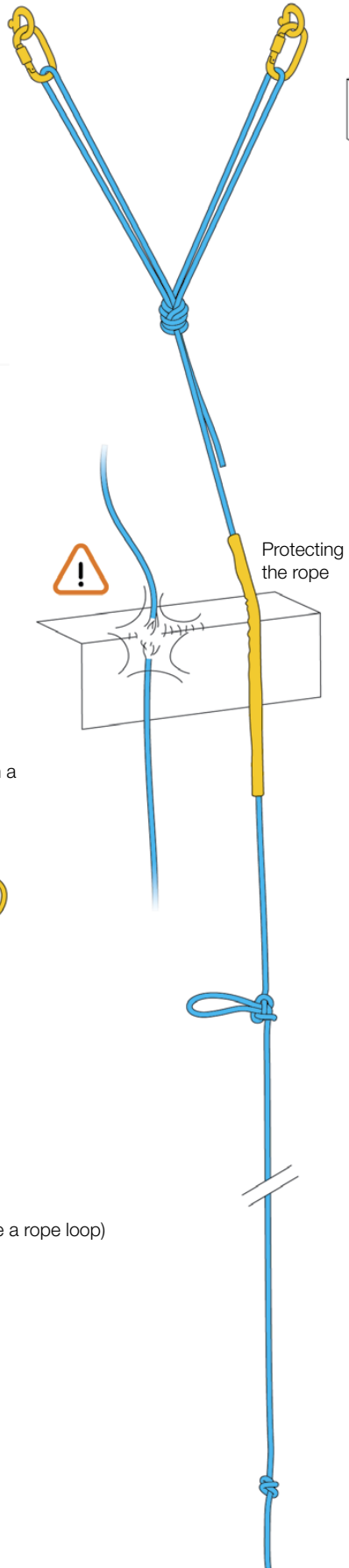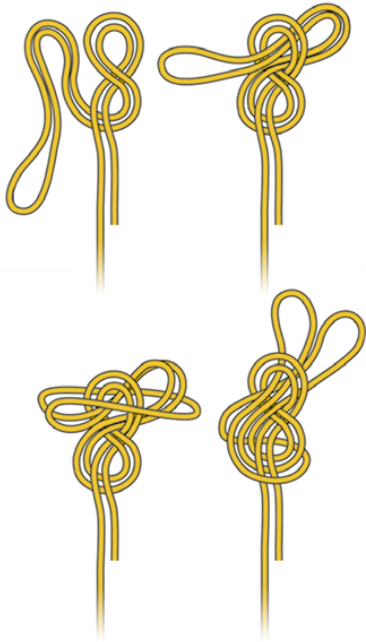
Case with one anchor at a distance

Protecting the rope

!

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

Anchor on a beam

8 kN

16 kN

Double fisherman's knot (for the rope end or to make a rope loop)

2 x 22 kN
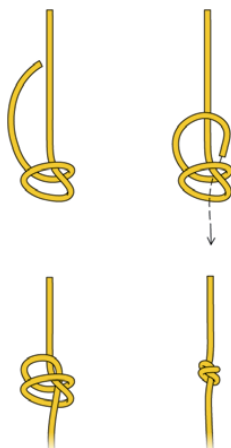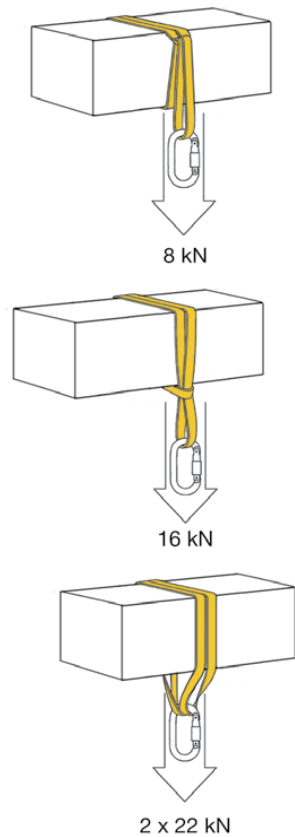
Load-sharing anchors with a sling

Effect of the angle on a load-sharing anchor

50 %
50 %
< 8°
100 %

58 %
58 %
60°
100 %

100 %
100 %
120°
100 %

Fixed anchor

Releasable anchor

RIG

SOS !

2. Descent

RIG
ASAP LOCK
AVAO
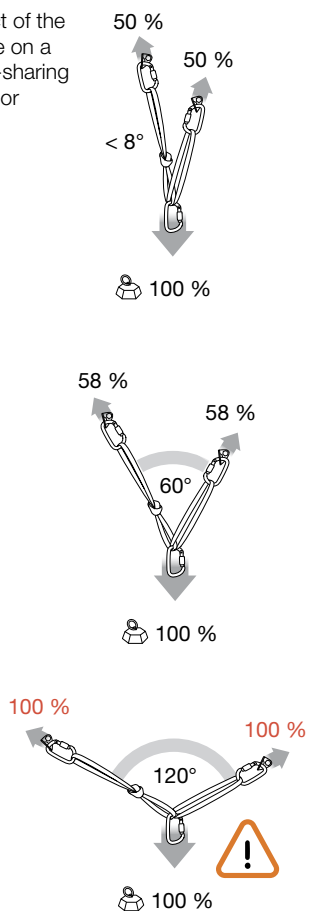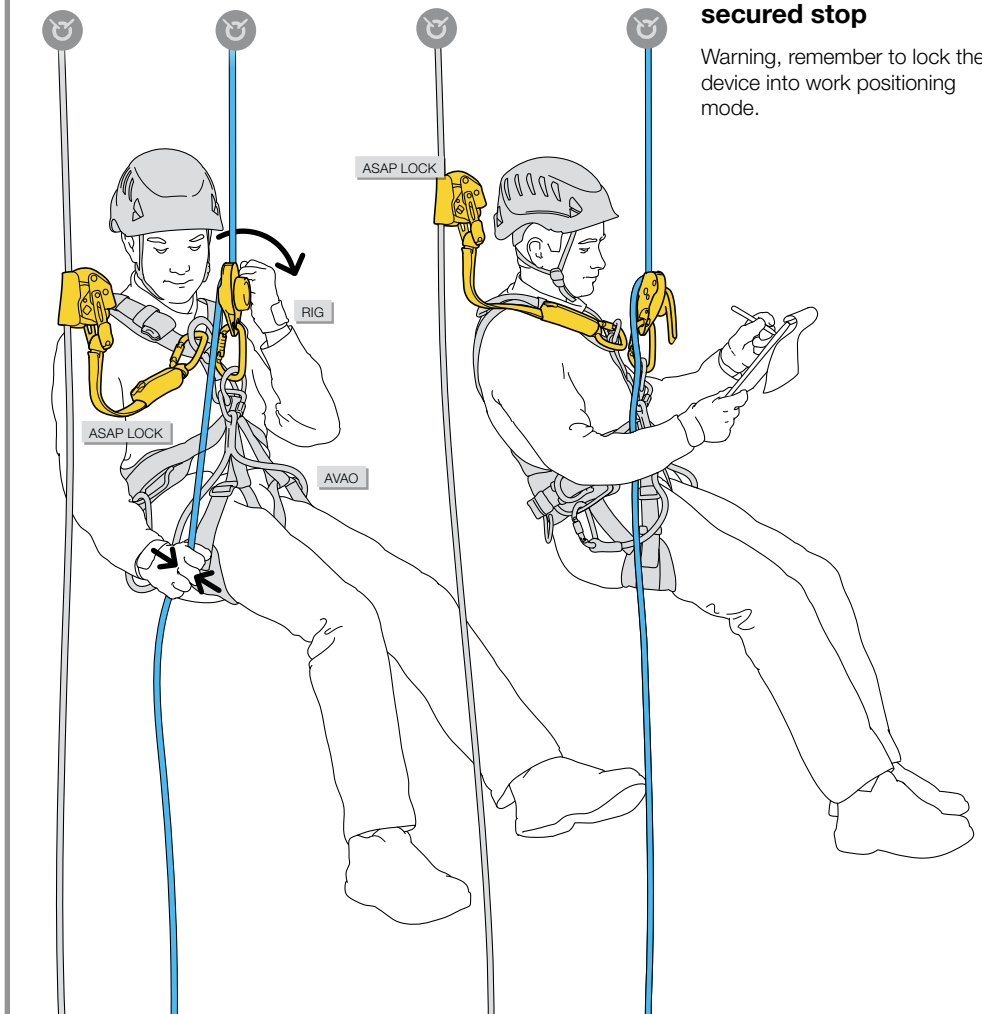
3. Work positioning - secured stop

Warning, remember to lock the device into work positioning mode.

ASAP LOCK
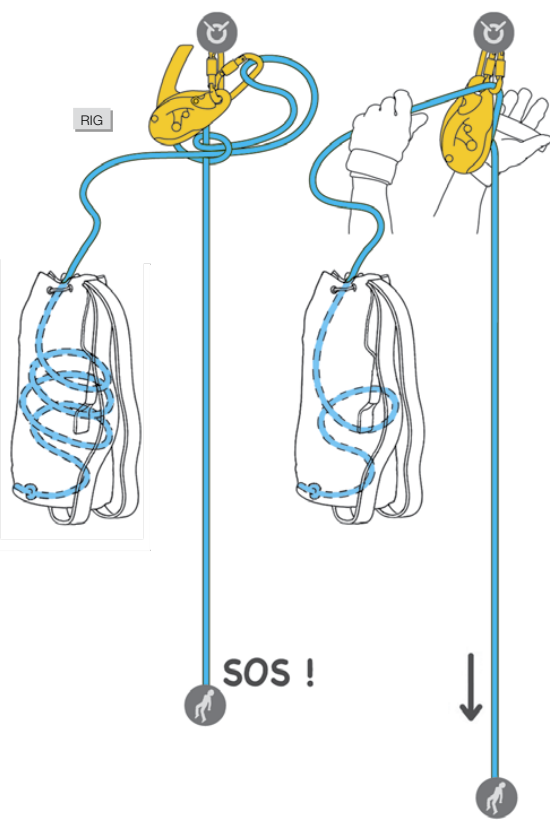
4. Working with sharp objects or molten metal splash

The descender is extended with a cable lanyard (25 - 30 cm).

The user should be able to easily manipulate the descender and position a rope clamp above it.

RIG
ASAP LOCK

VERTICALITY
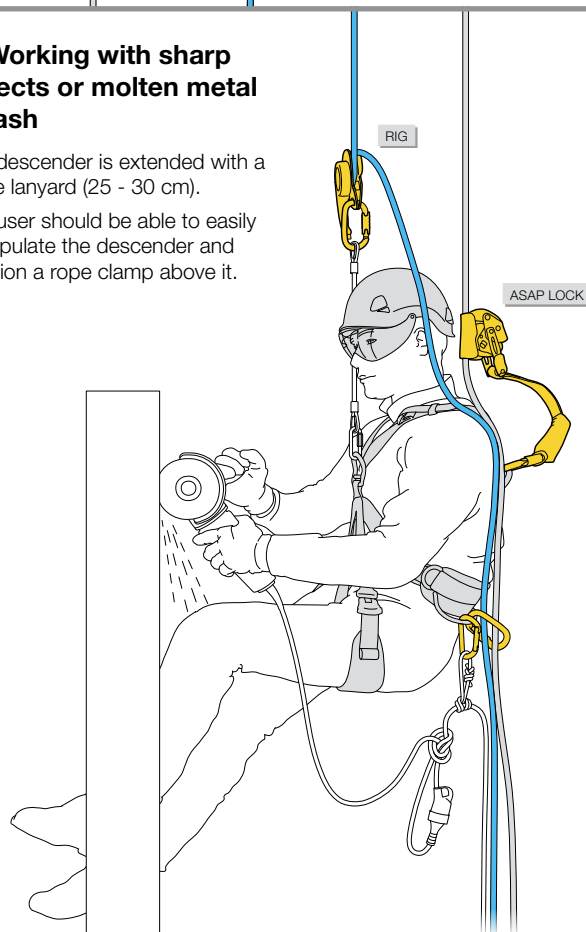
5. Ascending

Long rope ascent with ASCENSION handled rope clamp and
PANTIN foot-mounted rope clamp (simultaneous technique)

Ascending a short distance of rope

ASCENSION

VERTIGO TWIST-LOCK

PROGRESS

CROLL

PANTIN

ASAP LOCK

ASCENSION

I'D
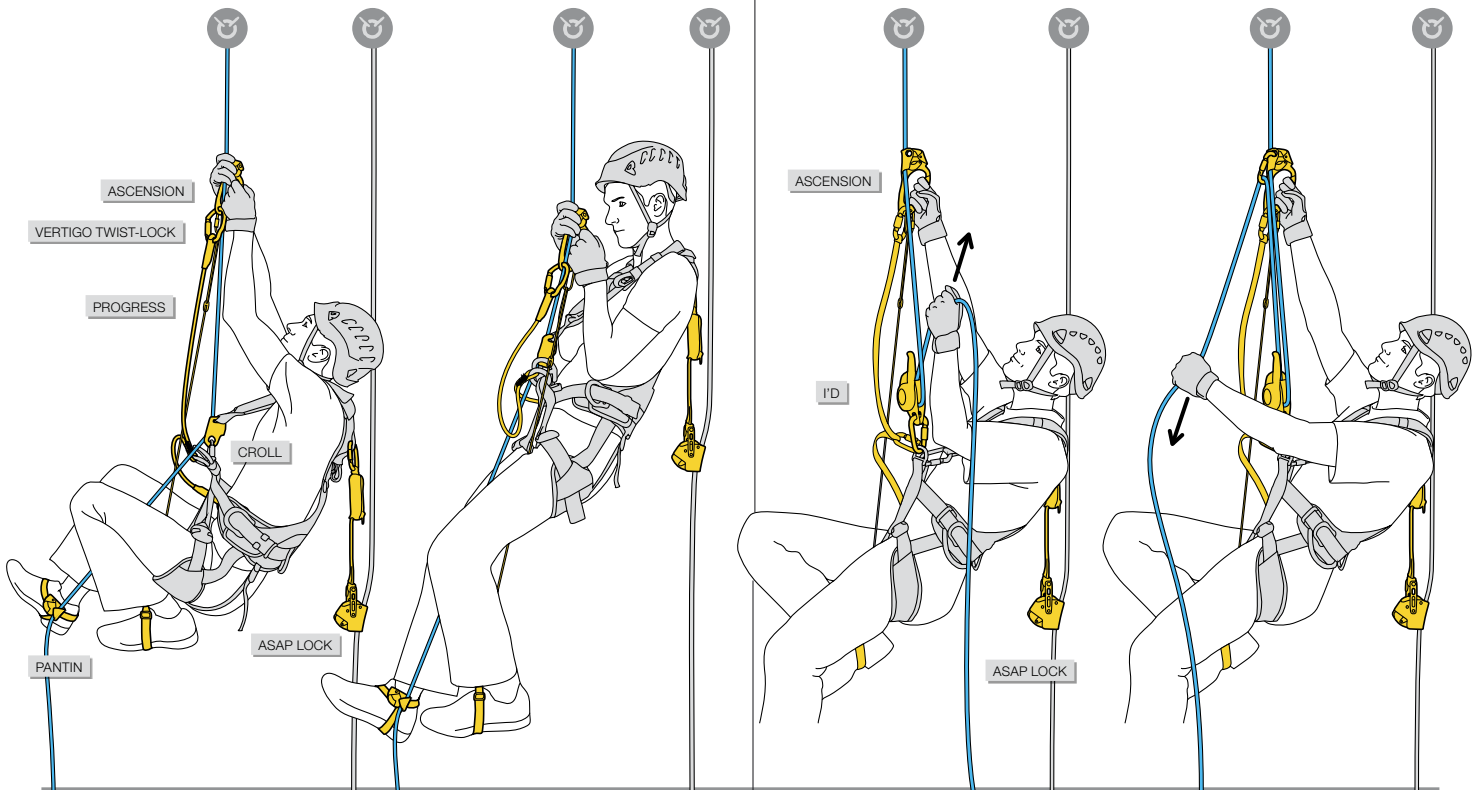
ASAP LOCK

6. Passing a re-belay on ascent:

1. Clip the lanyard into the re-belay and
transfer the ASAP LOCK

2. Weighting the foot loop, transfer the
CROLL

3. Start the ascent and unclip the lanyard

ASAP LOCK

PROGRESS

CROLL

ASCENSION

FOOTCORD
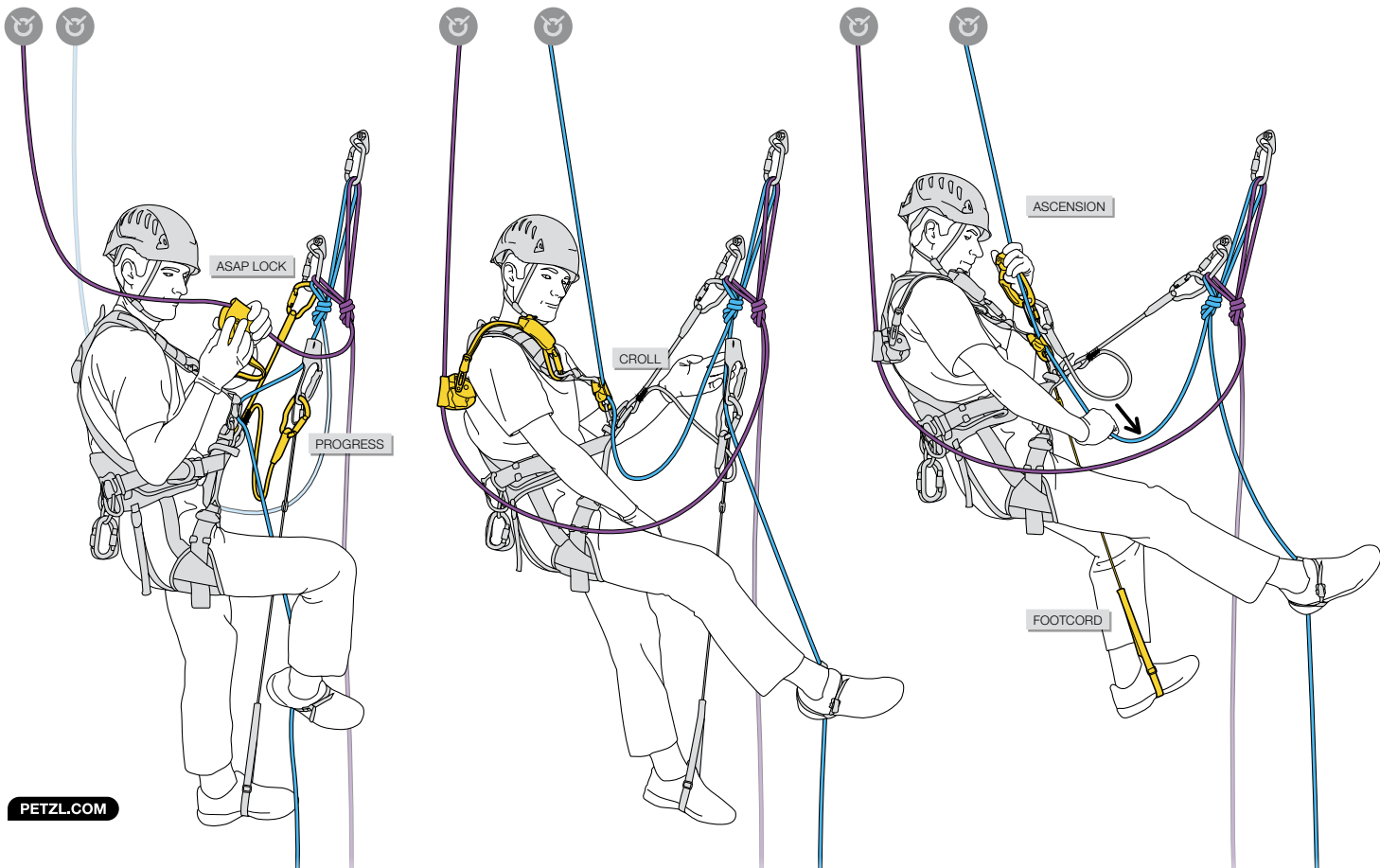
1. Combined lowering/raising system

• Advantage: quick transitions between modes (lowering/raising)

• Disadvantage: rope length is four times the travel distance

PAW

MINDER

RIG

ASCENSION

TWIN

Descent

Ascent
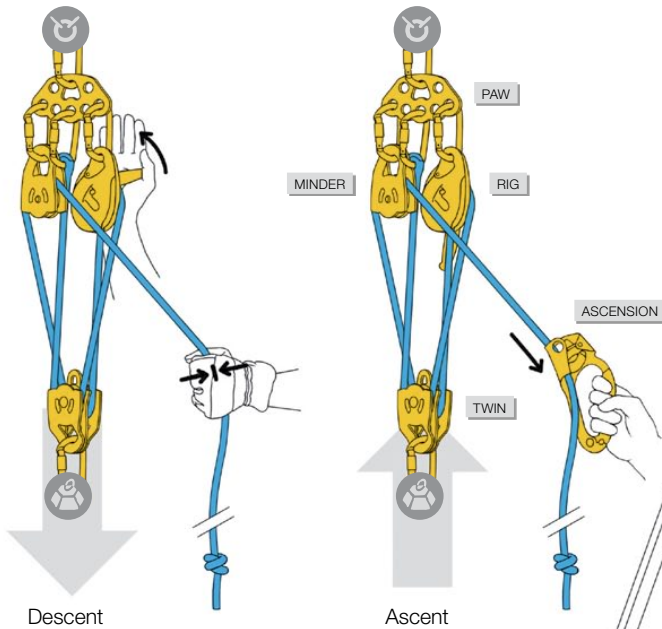
2. Independent lowering/raising systems

• Advantage: the length of the rope equals the travel distance

• Disadvantage: transitions are more complex (lowering/raising)

PAW

RIG

PAW

RIG

TWIN

ASCENSION

TWIN

BASIC

Descent

Ascent
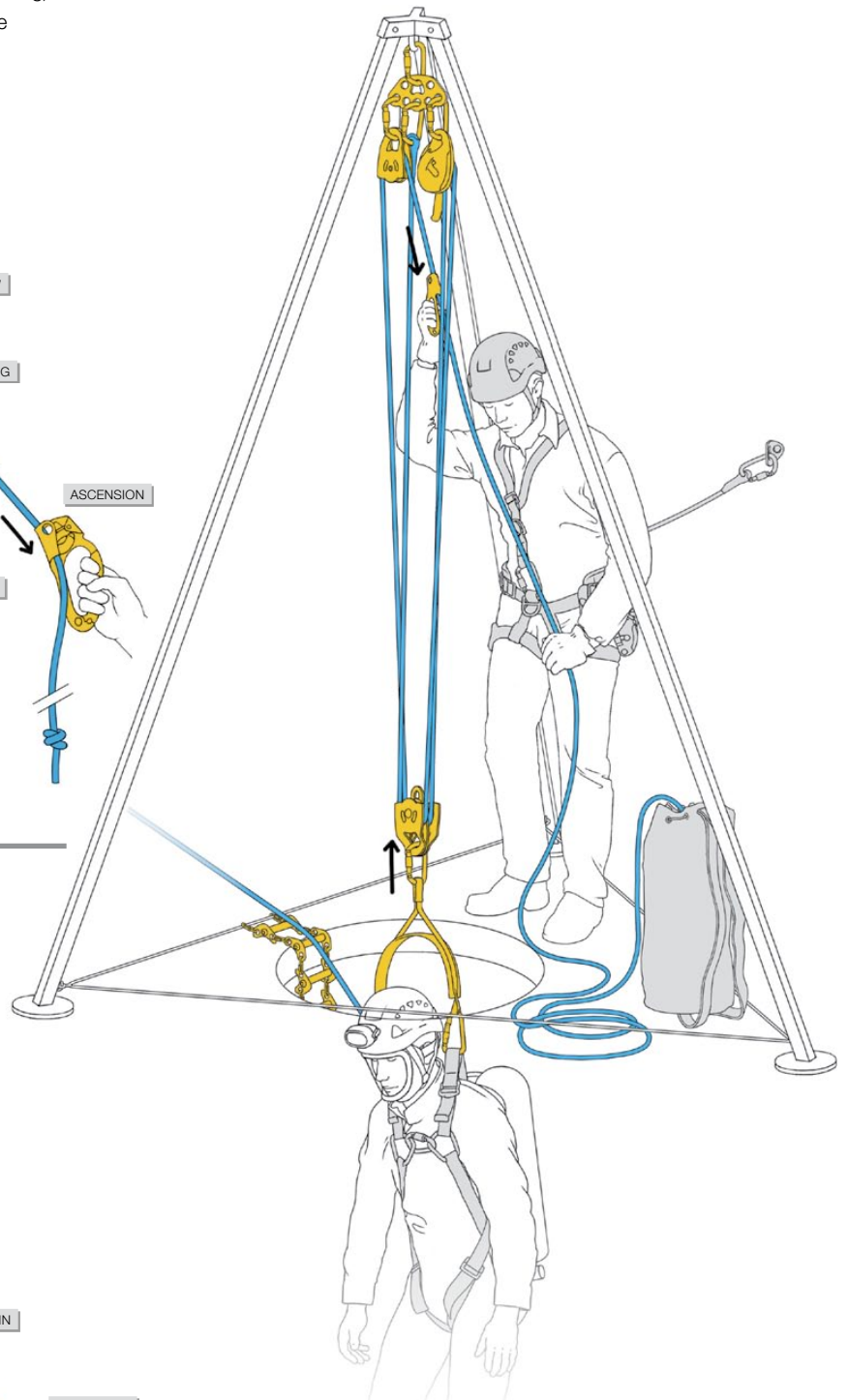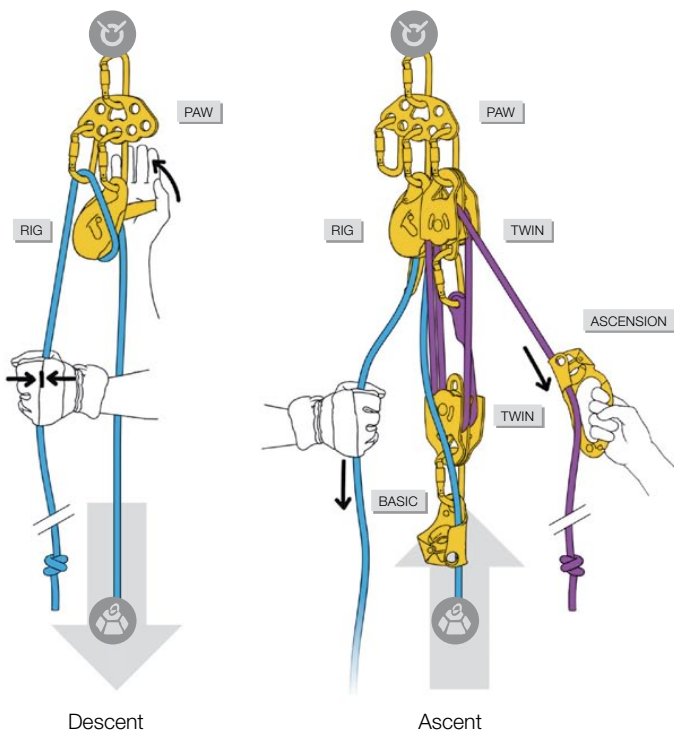
petzl.com

Find more information on how to use the ASAP LOCK mobile fall arrester in its Instructions for Use and Product Experience supplement, available at www.petzl.com/ASAP.

VERTICALITY

Laurent Pierron, Thierry Charlaix, Loriol, France © Boris Dufour

When it is not possible or appropriate to use an exterior means (elevating platform, ladder, etc.), the arborist uses a rope progression technique. To do this, he sets up a rope from the ground and installs an ascending system which is determined by the configuration and height of the tree. Once the arborist is in position, he should be comfortably and correctly positioned (harness with attachment bridge and adjustable lanyards).

The work positioning system should always be backed up during a cutting operation.

NEW 2014

SEQUOIA® SRT

The SEQUOIA SRT is a tree care seat harness for ascents on a single rope. It 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.

Tree access

• Double-rope ascent technique:

The arborist ascends his access rope (purple). In case of a hornet attack (or other problem) he can self-evacuate with the work rope (blue). A mule knot, or releasable knot, secures the ZIGZAG. This ascent technique is very efficient

ASCENTREE

ZIGZAG

SEQUOIA

PANTIN

ZIGZAG

SEQUOIA
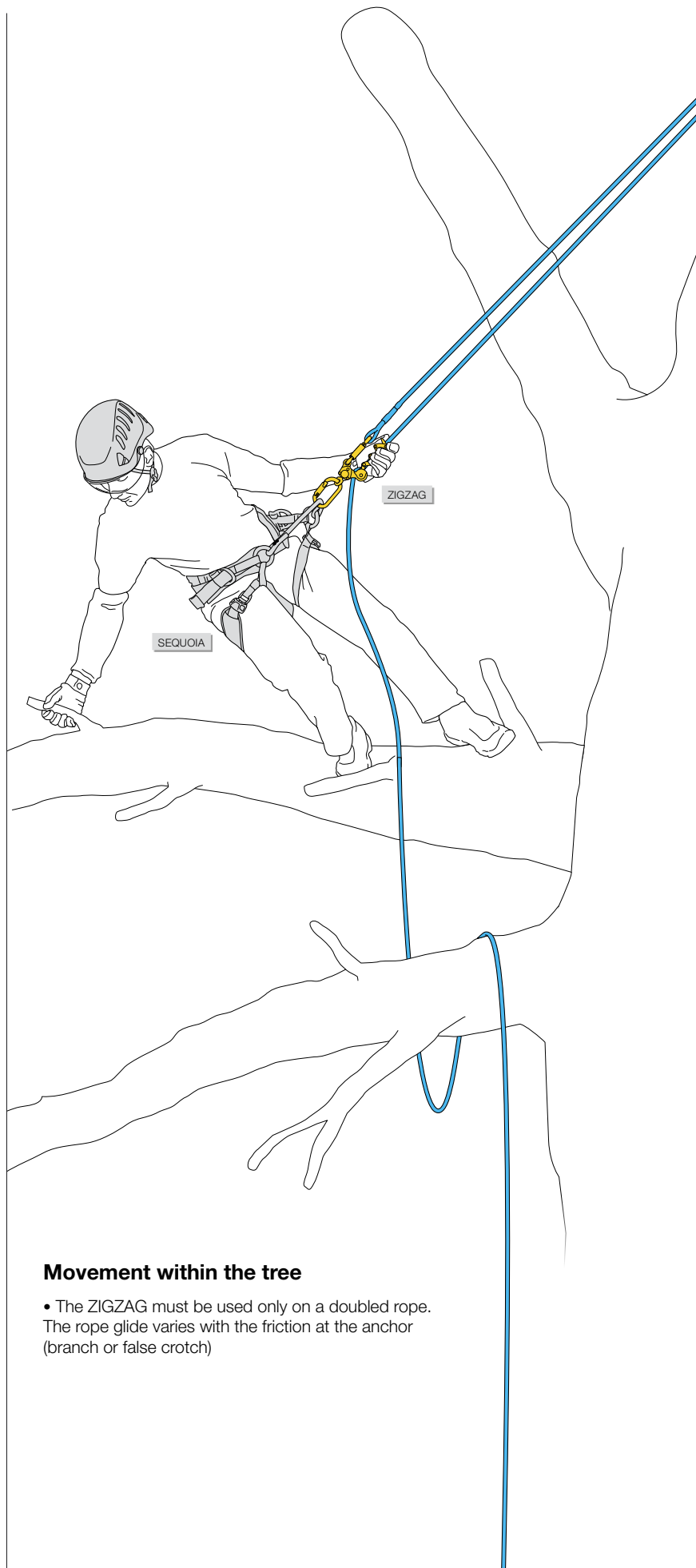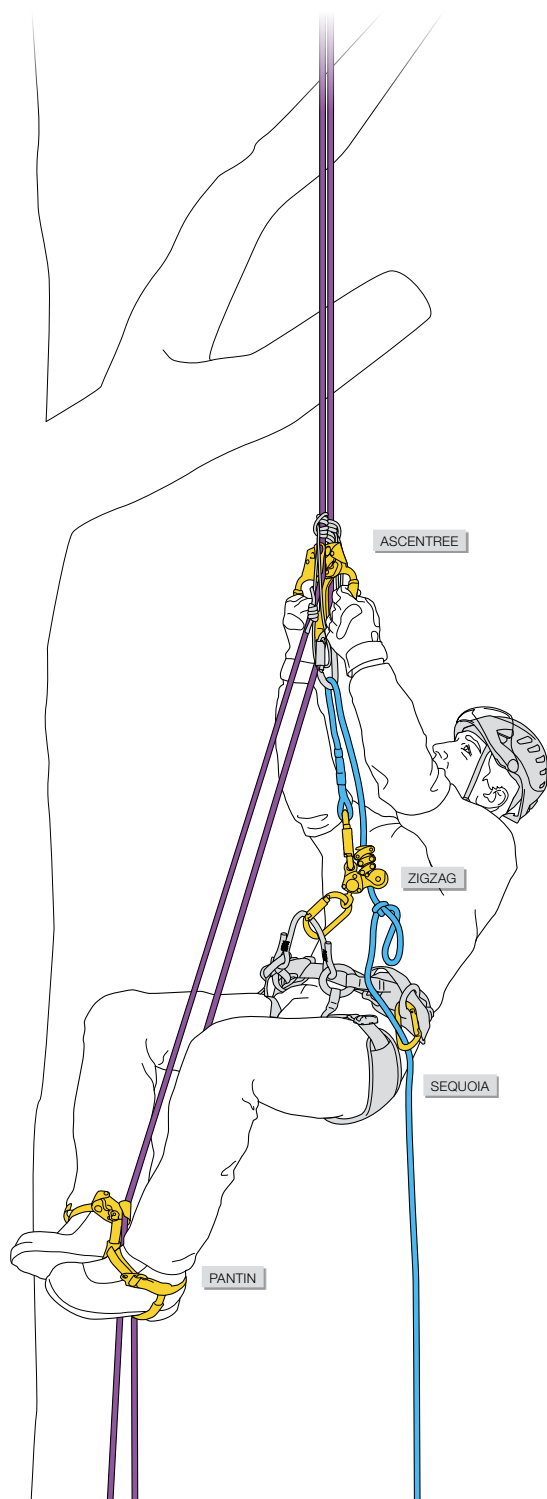
Movement within the tree

• The ZIGZAG must be used only on a doubled rope. The rope glide varies with the friction at the anchor (branch or false crotch)

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

ZILLON

SEQUOIA

ZIGZAG

Work positioning: double point

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

ZILLON

ZIGZAG

SEQUOIA
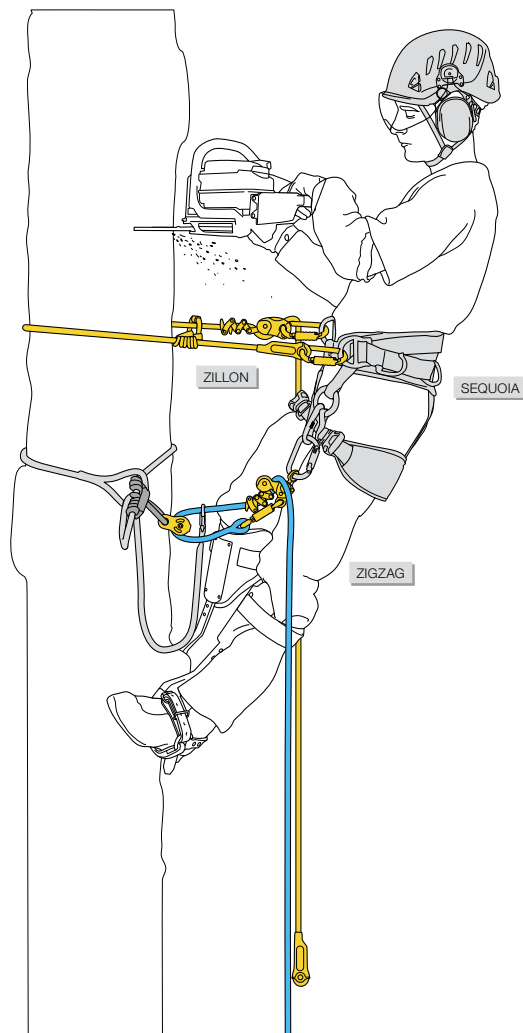
petzl.com

Find more information on how to use the ZILLON lanyard and the ZIGZAG mechanical Prusik in their Instructions for Use and Product Experience supplements available at www.petzl.com/ZILLON and www.petzl.com/ZIGZAG.

VERTICALITY

EEE – OMEXOM, ligne à 2 x 400 kV Baixas – Gaudière, La Tour de France, Pyrénées Orientales, France © Sam Blé / Lafouche

The techniques used for moving around depend directly on the specifics of each structure and the presence/absence of collective protection. In its absence, team members must ensure their own safety with PPE (Personal Protective Equipment). This is the case, for example, when working on an antenna or when setting up or taking down structures for events. To protect himself in case of a fall, each worker must use a fall arrest system (for example: self-belay on the structure with an energy-absorbing lanyard or on a lifeline with a mobile fall arrester). If necessary, a positioning system is used to enable hands-free work. If the structure does have collective protection, a work positioning system (adjustable lanyard) may be sufficient.

VERTEX BEST and VIZEN

With its strong chin strap, the VERTEX BEST helmet sets the standard in head protection for workers at height. Its closed shell ensures protection against electrical hazards and molten metal splash. Its six-point webbing suspension ensures comfort, and its CenterFit adjustment system adjusts the headband and keeps it centered on the head.

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 a helmet.

NEW 2014

1. Backed-up ascent with a mobile fall arrester on the rope

An example of a system that allows the rope to be installed from below, by throwing, with a pre-installed rescue system

ASAP

RIG
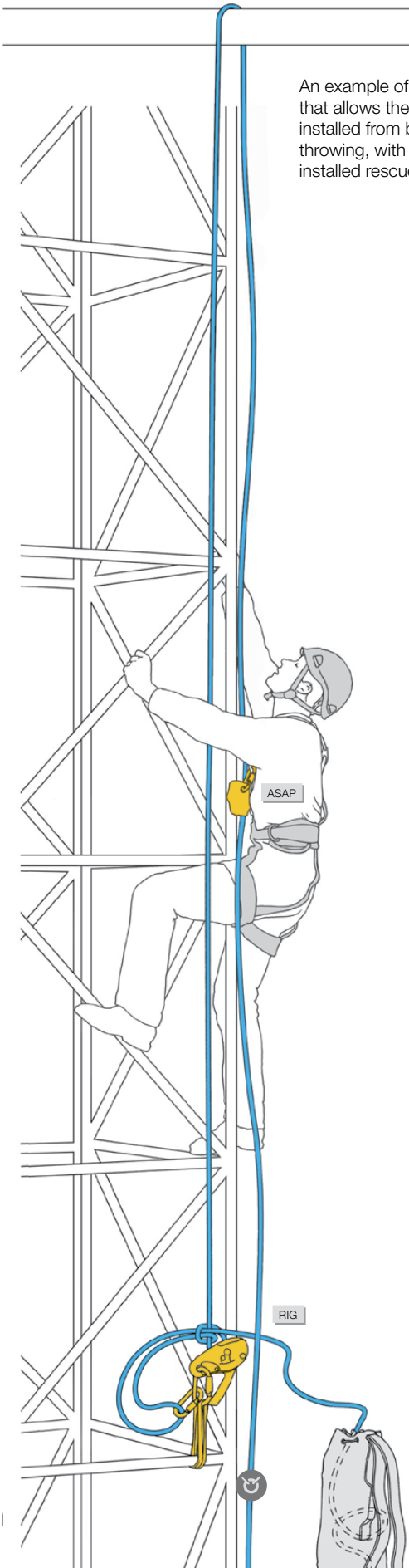
2. Backed-up ascent using a Y-shaped energy absorbing lanyard

ABSORBICA-Y MGO

AVAO
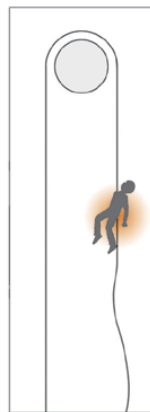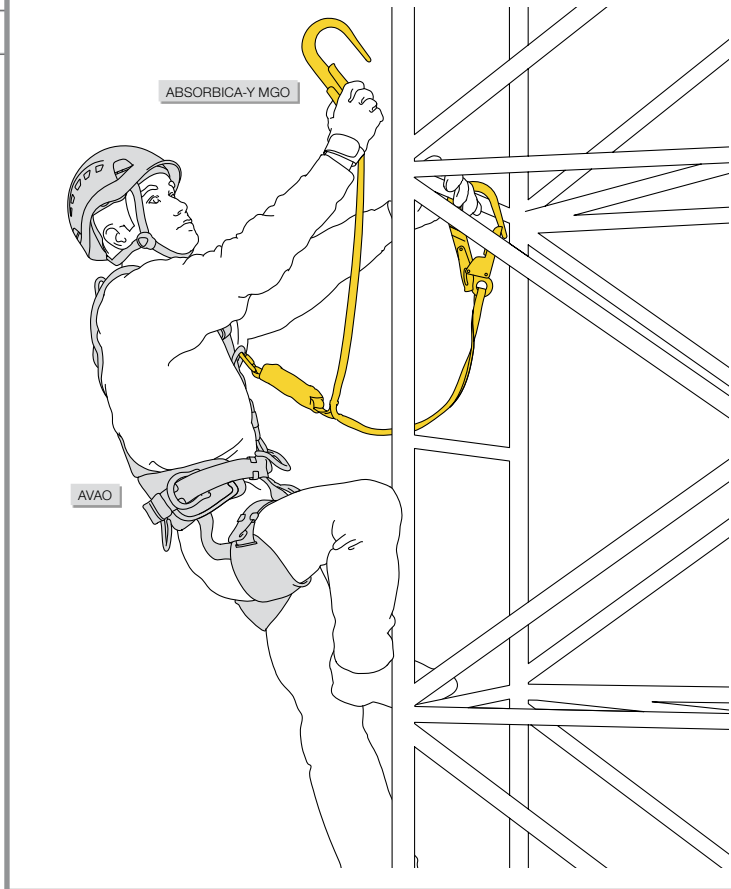
SOS !
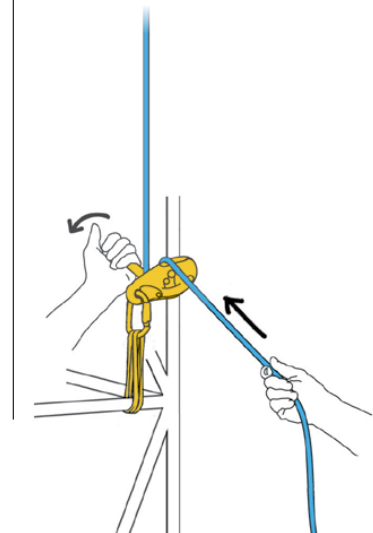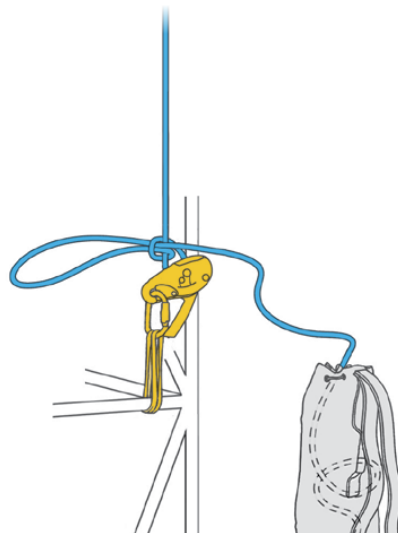
3. Backed-up ascent using climbing techniques

Minimizing fall length by placing intermediate anchor points.

I'D
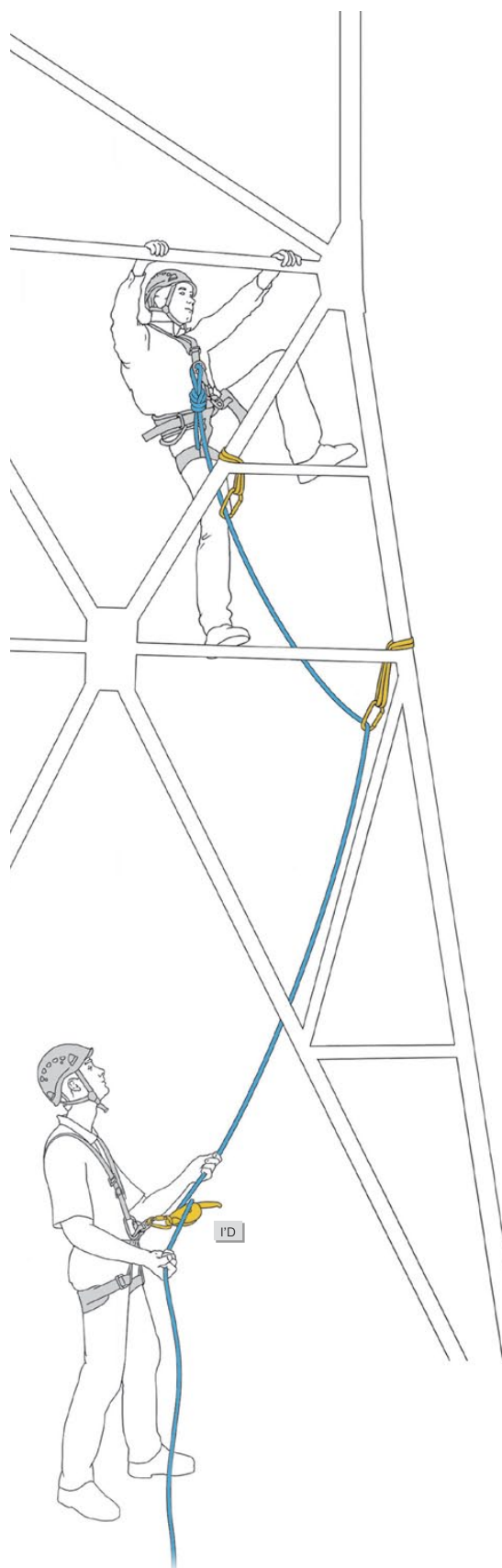
4. Work positioning using an adjustable lanyard

ASAP

GRILLON
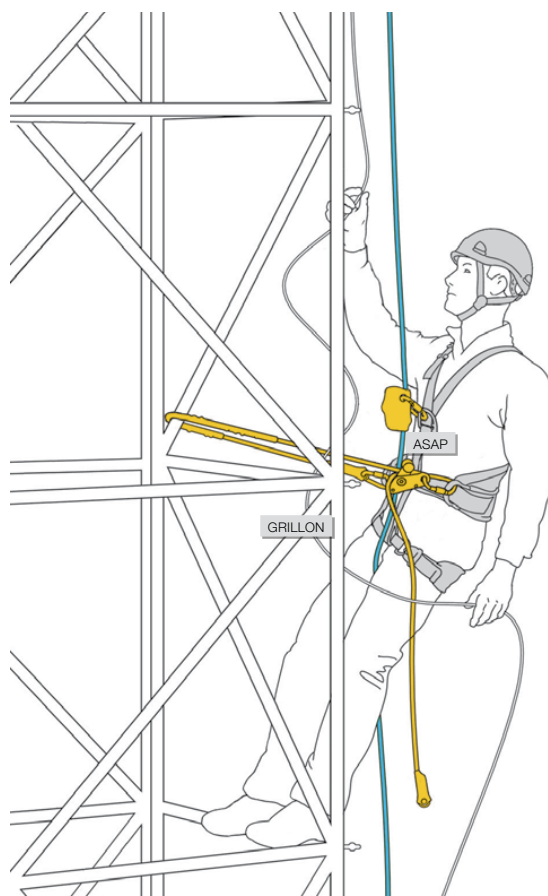
petzl.com

Go to www.petzl.com/over100kg to find a tool that proposes equipment solutions for workers weighing 100 to 140 kg according to their weight and equipment.

140 kg

?
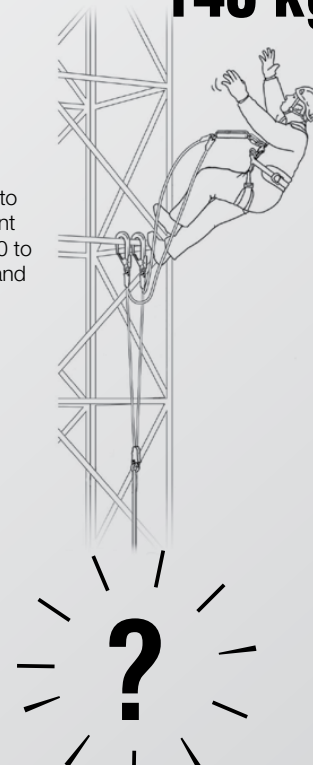
Hagmanstak, Stockholm, Suede © Lafouche
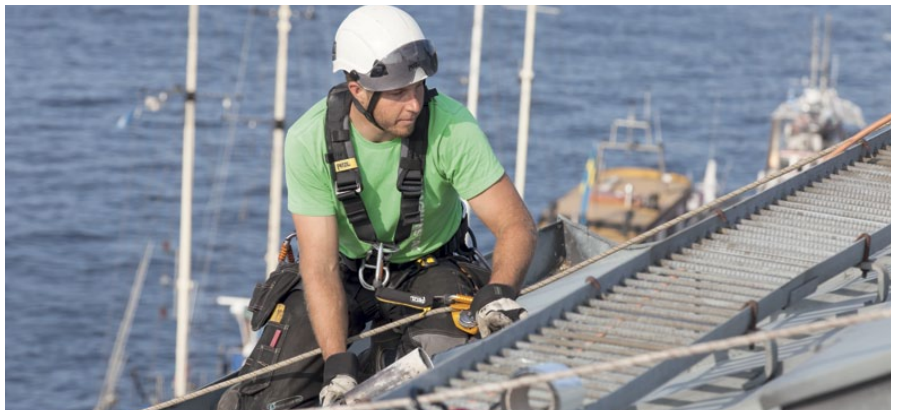
A safety device must be put in place before working on a roof for protection in case of slips or falls. The type of system is determined by the length of the operation. If the operation is long, it should be protected by collective protection in order to eliminate any risk of falling. If it is a short-term, temporary operation, individual protection is used. PPE is generally necessary for installing the collective protection, if the building is not already equipped with it. In this situation, there is a great risk of falling. Each person must use a fall arrest system (for example, energy absorber with mobile fall arrester and safety rope). If collective protection is present and adequate for fall protection, a work positioning system with adjustable lanyard is the perfect solution.

NEW 2014

ASAP®

With its unique locking system, the ASAP is a reference product in fall protection for workers at height. The mobile fall arrester moves freely along the rope without any manual intervention and accompanies the user in all his movements. In case of shock or sudden acceleration, the ASAP locks on the rope and stops the user.

VERTICALITY

1. Roof access

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

a.

b.

c.

d.

ASAP
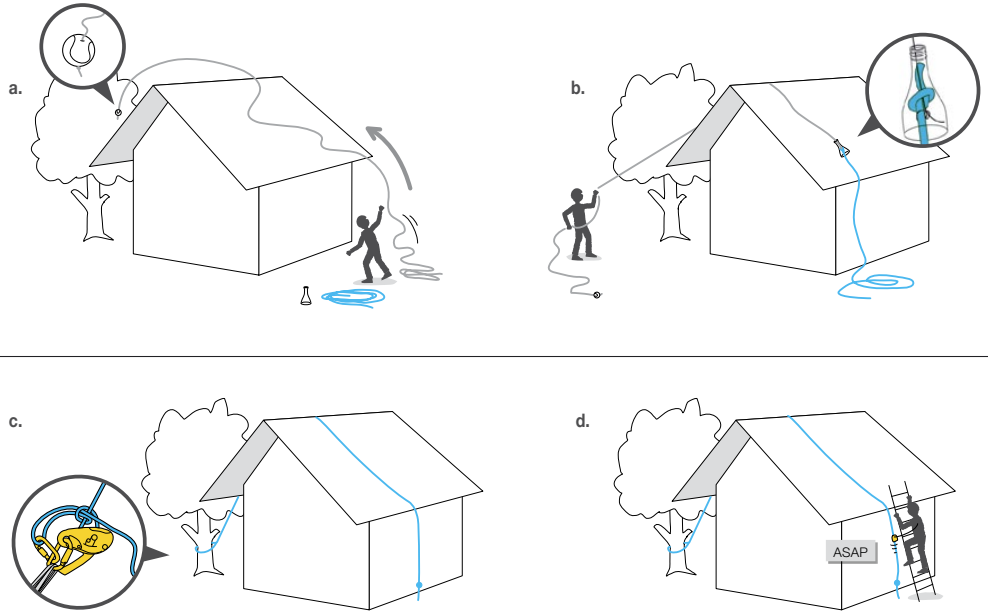
2. Long-term use

With individual positioning system and collective protection

GRILLON

GRILLON

AVAO
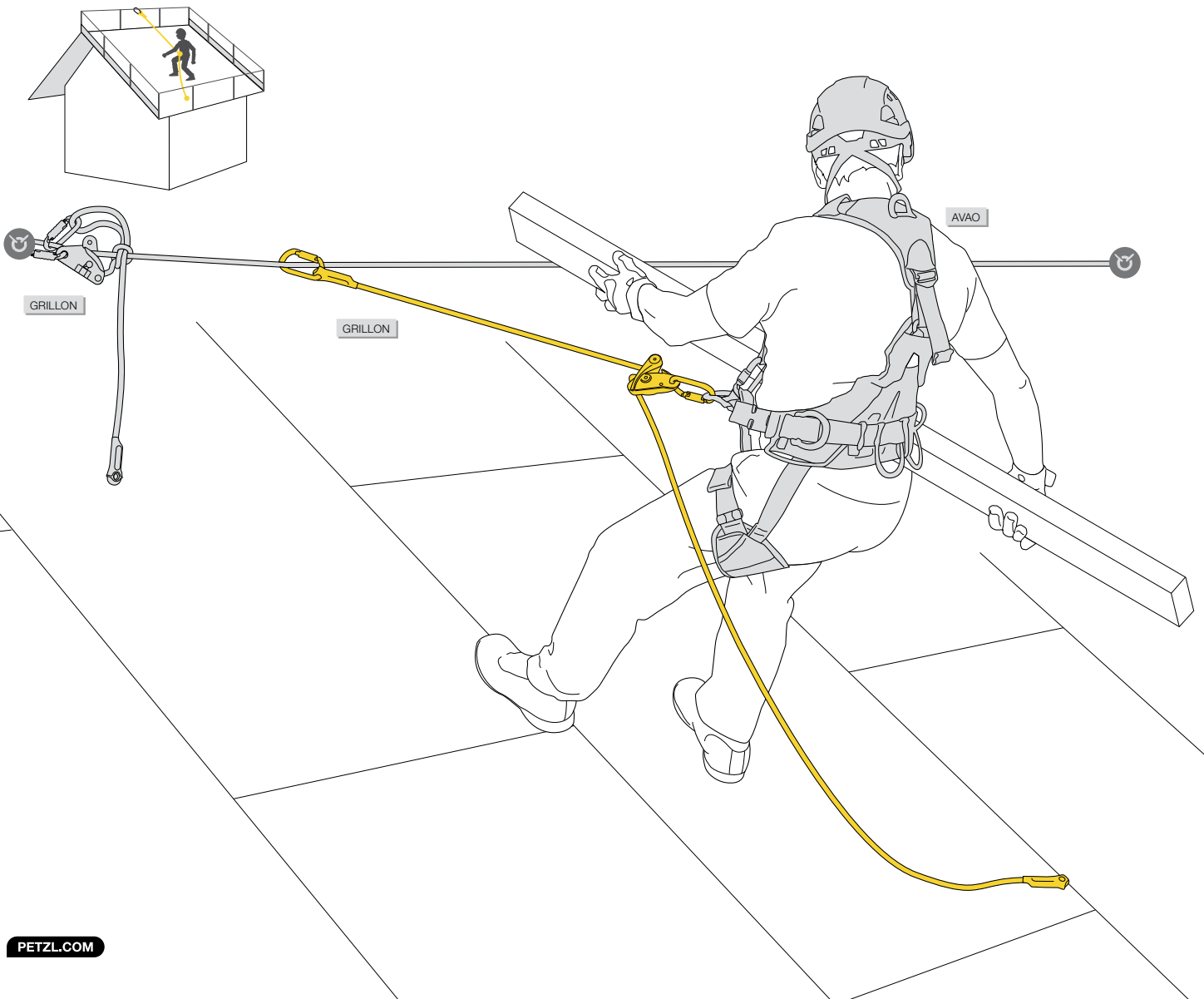
3. Occasional use

With individual fall arrest system

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

NEWTON
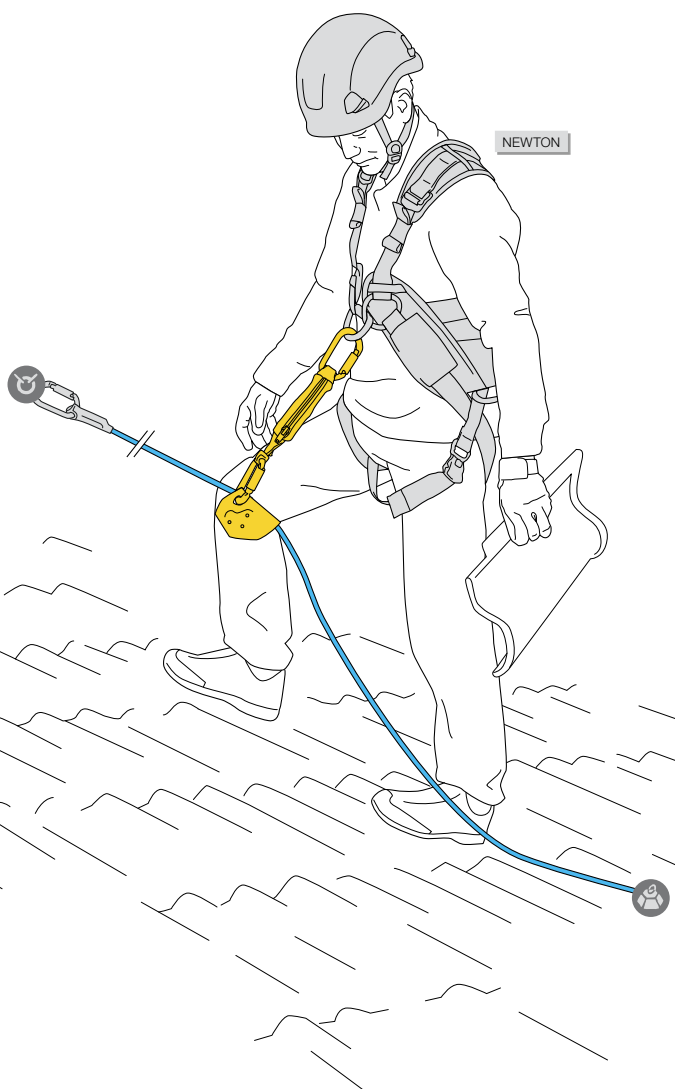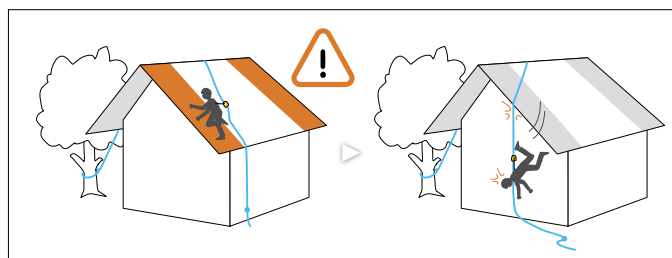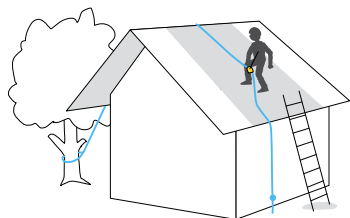
• Working at the edges
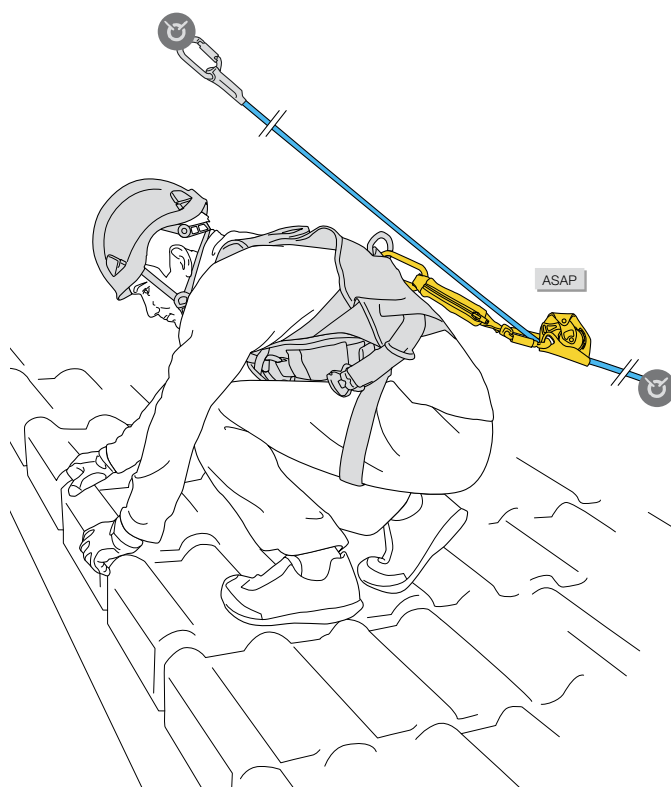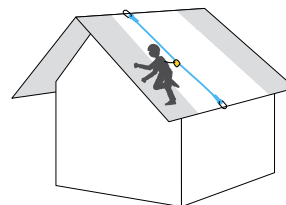
ASAP

petzl.com

Find more information on how to use the ASAP mobile fall arrester in its Instructions for Use and Product Experience supplement, available at www. petzl.com/ASAP.

Information is non-exhaustive. Refer to the other pages as well as to the Instructions for Use and technical manuals. Technical training is essential.

GMSP 05 (Groupe Montagne Sapeurs Pompiers des Hautes-Alpes), Chourum du Rocher de Corne, Massif du Dévoluy, Hautes-Alpes, France © Lafouche

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

Self-rescue

On sites where the main access could be cut off by fire, people must be ready to evacuate the building quickly. They have evacuation kits. These kits are either portable or installed permanently on the structure. Where there is no identified anchor possibility, these people can use a hook-based system. In both cases, teams are 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 patient. 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 precisely 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 quickly assess the situation and know all the techniques for progression and safety on a rope.
- When access is difficult, these people must be able to respond with their own equipment. They have light, versatile equipment
- When access is easier or possible by motorized means, they use more specific equipment

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.
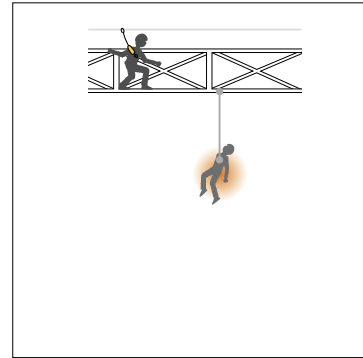
1. Access the patient

Accessing the patient can sometimes be complicated. Difficult-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 rope clamp techniques. In other situations, rescuers are obliged to use climbing techniques to reach the patient.
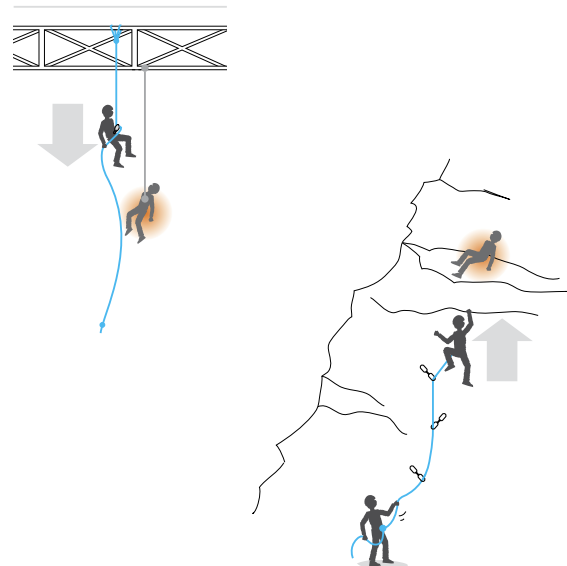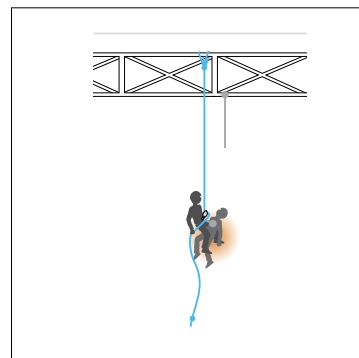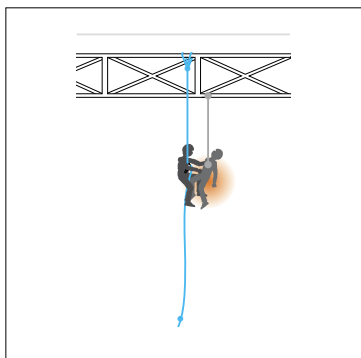
2. Releasing the patient

Hauling

This involves using a mechanical advantage pulley system in order to easily raise the patient. When the rescuer is alone, he will create such a system to conserve energy. The disadvantage is that a long rope is required. If there are enough rescuers, a lower mechanical advantage is used to hasten the operation.

"Balancier" technique

This is a counterweight system. The rescuer is on one side, the patient on the other. The rescuer unweights the rope on the patient's side by pulling on it. The patient 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 big weight difference between the rescuer and the patient.

Example of hauling

46 daN

100 daN
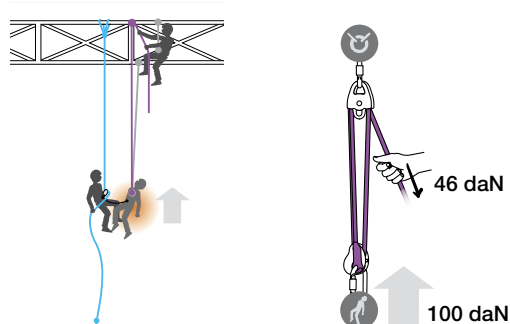
Example of counterbalance

80 daN   27 daN

110 daN
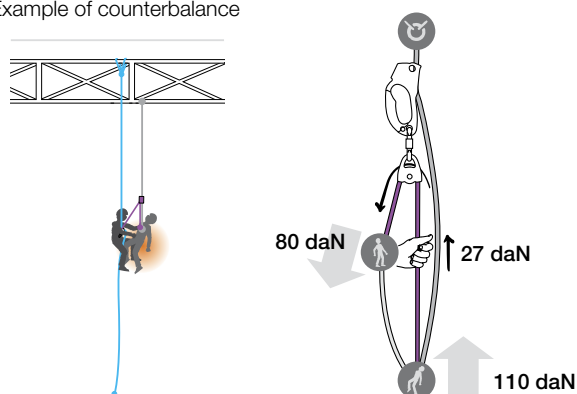
3. Evacuating the patient

Downward, the evacuation is carried out with a descender. This is the easiest technique currently in use. When downward evacuation is impossible, the patient 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

VERTICALITY
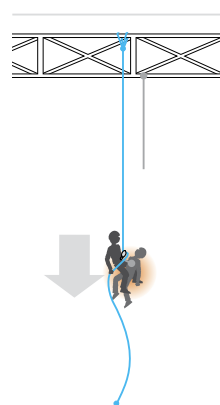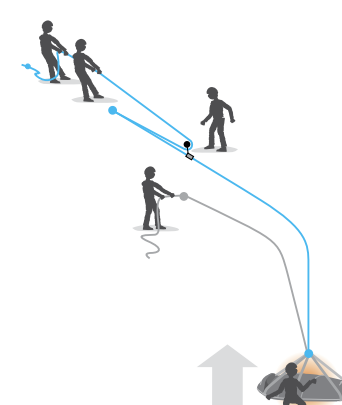
New York Fire Department, New York (USA) © Kyra Neeley
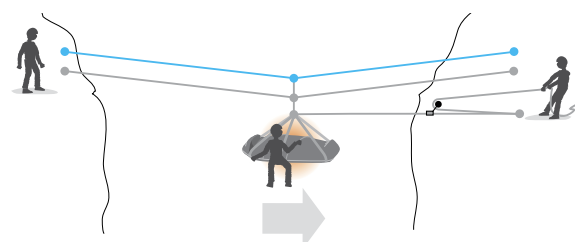
Following a tragic accident in 2004, the Fire Department of New York (FDNY) wanted to equip each firefighter with an individual system of protection, allowing emergency self-evacuation from a burning building.

To do this, the FDNY conducted a very specific study of their needs. Over forty technical solutions were proposed and more than 5000 tests were carried out in their training centers. During this study, the FDNY approached Petzl to request the development of a device based on the GRIGRI (belay/rappel device) and to fine-tune a new emergency evacuation technique. The EXO was the result of this association of experts and is now carried by all of New York's firefighters. This system allows each firefighter to quickly escape a burning building, with a high level of safety.

EXO

Personal escape system with anchor hook adapted for locations where the possibility of finding an anchor point is uncertain. This solution applies particularly to firefighter operations in a burning building (e.g. attachment to a window sill as a last resort).

Rapid horizontal movement

1

2

3
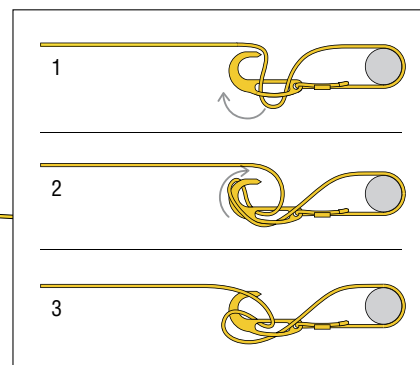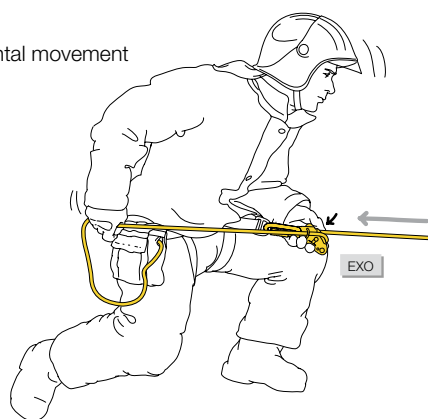
Going through a window while maintaining the anchor hook on the window sill. Locking the left leg against the interior wall to go with the movement.

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.
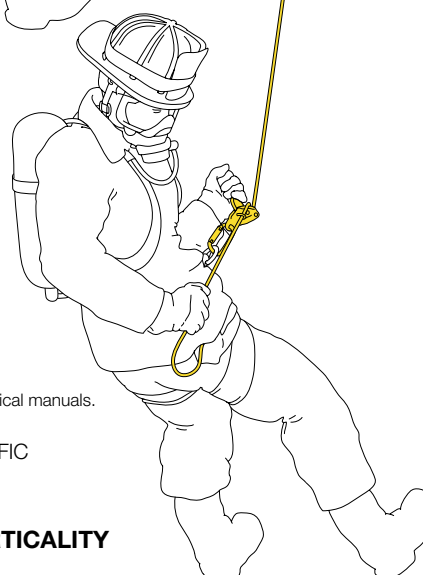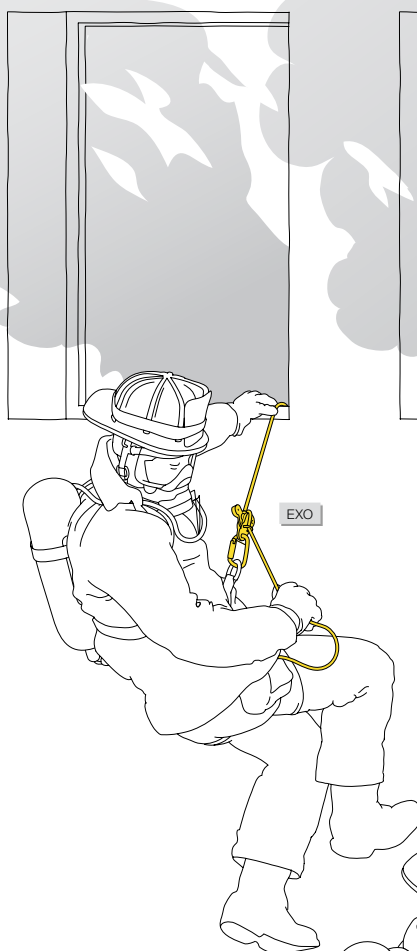
EXO

EXO

Information is non-exhaustive. Refer to the other pages as well as to the Instructions for Use and technical manuals. Technical training is essential.

THIS PRODUCT MUST ONLY BE USED AFTER THE USER HAS RECEIVED SPECIFIC PETZL TRAINING.

VERTICALITY

C2 Safety Training Facility, Uppsala , Suede © Lafouche
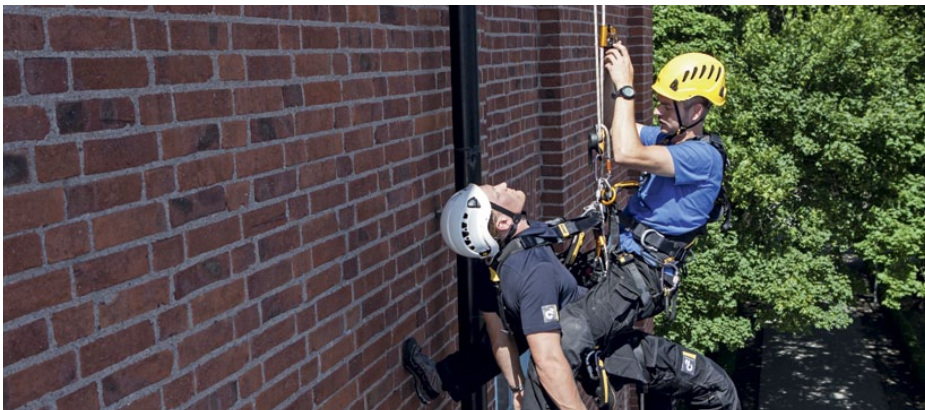
If a victim is not able to rescue himself, the on-site work team has to immediately intervene and move him to safety to wait for the outside rescue team to arrive. To be able to do this, the personnel should take a specialized course and train regularly. A rescuer will intervene with his own equipment or use a specific rescue kit, following the worksite's rescue plan.

MICRO TRAXION

The MICRO TRAXION is an ultra-compact, extremely light progress-capture pulley that is exceptionally efficient. It may be used as a simple pulley by locking the cam in the raised position. The toothed cam with self-cleaning slot optimizes performance under any conditions (e.g. frozen or dirty ropes).

VERTICALITY

Release and evacuation of a patient on a CROLL

Operation from below by a team member with his own equipment. The rescuer must do his risk assessment before intervening and include a check that the patient's ropes are in good condition. The counterbalance system is used to transfer the patient onto the descender.

The rescuer ascends on the patient's safety line.

1. The rescuer transfers himself to the RIG descender, connects his lanyard to the patient and moves his ASAP above the patient.

2. The rescuer puts a second connection in place. He can then remove the equipment that is in the patient's way.

1

ASAP LOCK

PROGRESS

2

RIG

3

ASCENSION

FOOTCORD

4
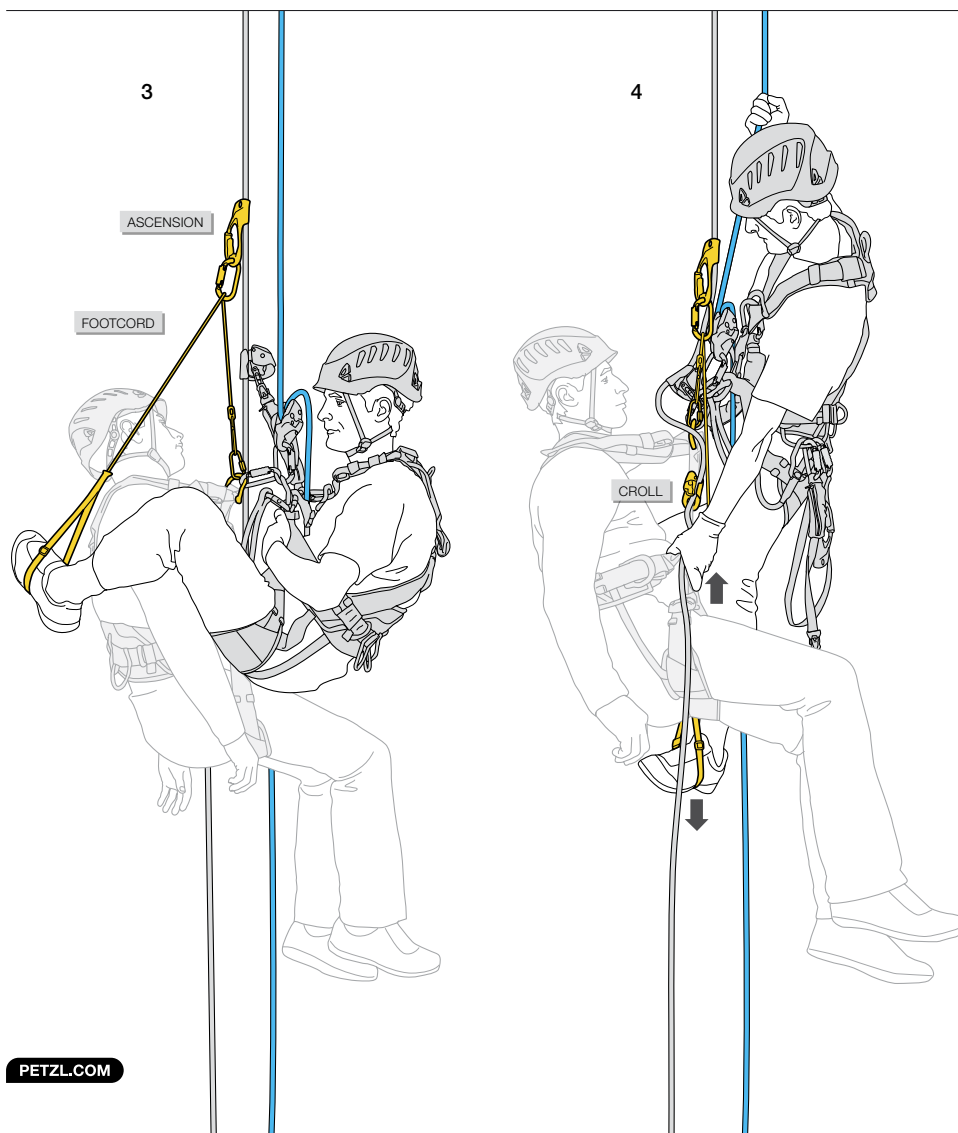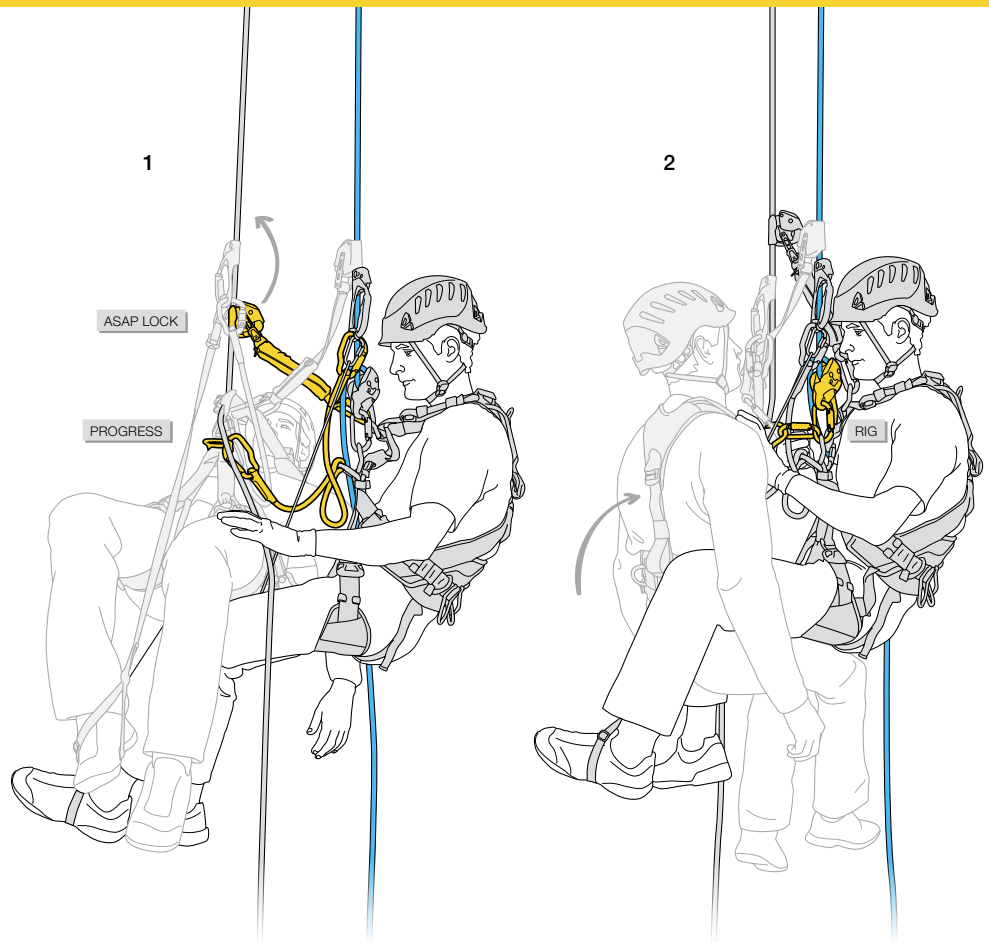
CROLL

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

4. In counterbalance on the foot loop, the rescuer blocks the rope from running through the CROLL and raises the patient. He removes the CROLL and takes up as much rope slack as possible in the RIG descender.
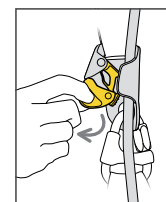
5. The rescuer, hanging on the RIG, recovers his rope clamp. He installs a braking carabiner and accompanies the patient to the ground.

RIG
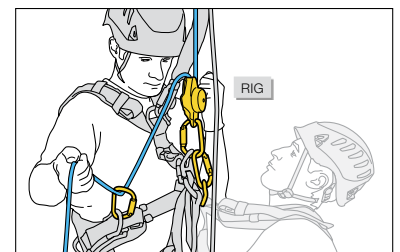
Release and rescue using reversible rescue kit

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

1. Patient suspended by his lanyard, with the energy absorber torn by the fall

2. Hauling (allows the patient to be released)

3. Lowering the patient

1

ABSORBICA-I

2

GEMINI

MICRO TRAXION

I'D

3
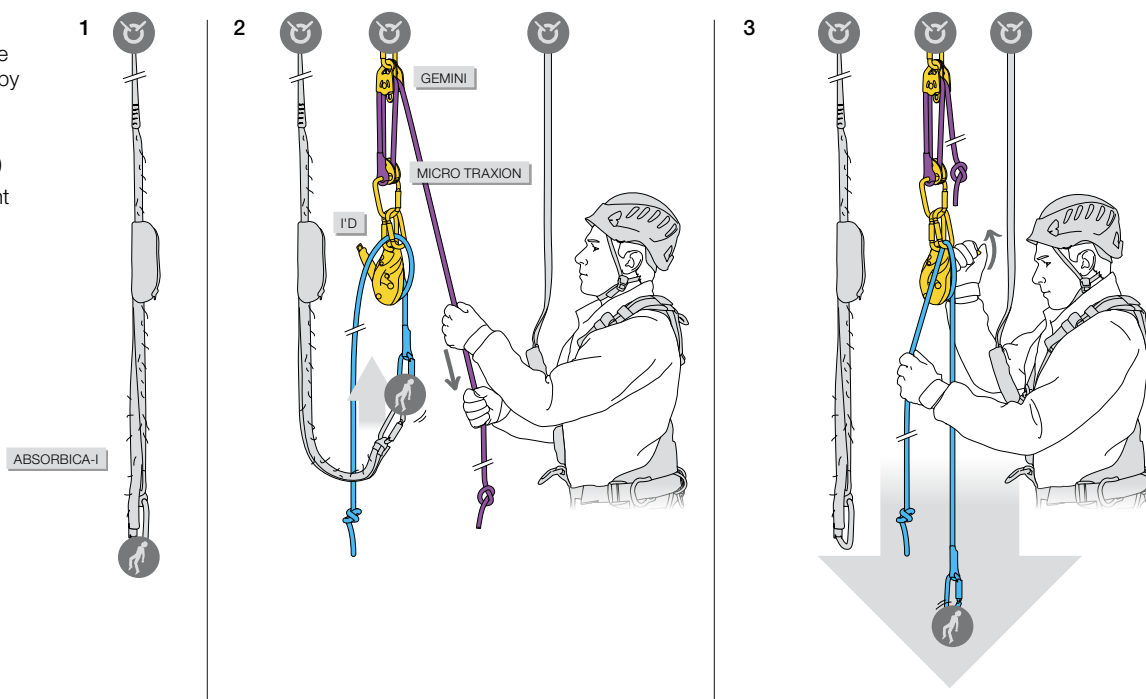
• Accompanied evacuation (protecting and distancing the patient from the structure):

1. Patient suspended by his lanyard, with the energy absorber torn by the fall

2. Hauling (allows the patient to be released)

3. Accompanied descent
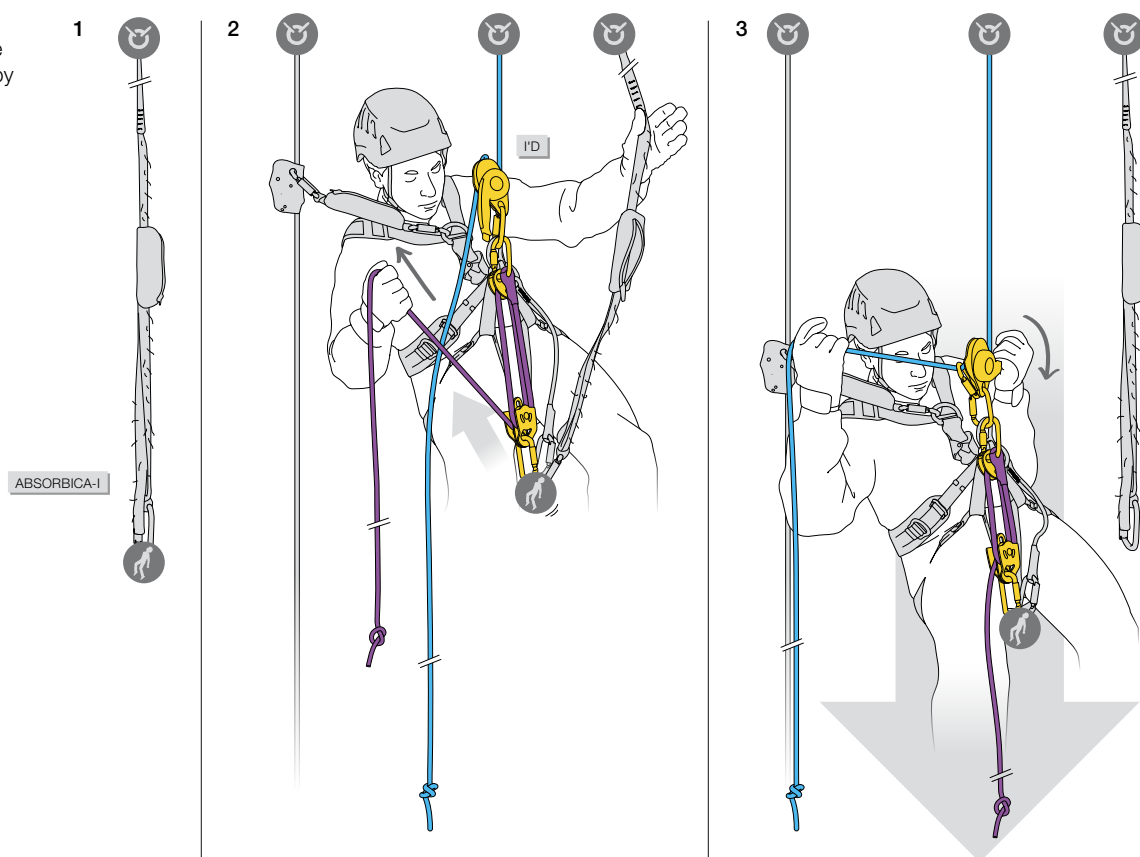
1

ABSORBICA-I

2

I'D

3

VERTICALITY

GMSP 05 (Groupe Montagne Sapeurs Pompiers des Hautes-Alpes), Chourum du Rocher de Corne, Massif du Dévoluy, Hautes-Alpes, France © Lafouche

Technical rescue teams intervene in particularly difficult or dangerous situations. Intensively trained and taught, they operate in any environment. These specialists master all the progression and belay techniques on rope.

• Downward evacuation takes advantage of gravity, applying different techniques determined for specific types of terrain

• Upward evacuation is a team effort and requires perfect coordination by everyone involved. It demands techniques which are sometimes particularly complex: hauling with a mechanical winch, creating a hauling system built from lightweight pulleys, using counterweight techniques, etc.

• Tyrolean evacuation is used for difficult locations: urban or industrial sites, confined spaces, canyons, etc.. This complex system can only be used by specially trained teams, in order to ensure the viability of the system and the choice of technique used

NEW
2014

PRO TRAXION

The PRO TRAXION progress capture pulley was 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 to prevent the pulley opening during use. The lower connection point can be used to create different types of hauling systems.

Upward and horizontal evacuation in a confined space

1. Rescuer hauls the NEST litter in counterbalance on rope clamps. Rescuer regulates the hauling. A third person back-up belays on a second rope.

2. The rescuer below gives slack using a descender. The back-up belayer hauls the NEST litter, allowing it to tilt to a horizontal position with the help of the STEF.

3. Recovery of the NEST by team members.

1

2

PRO TRAXION

I'D

STEF

ASCENSION

NEST

3

I'D
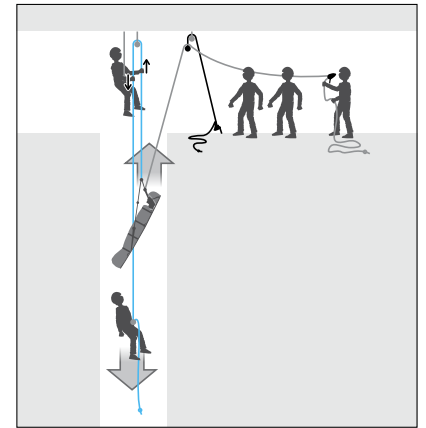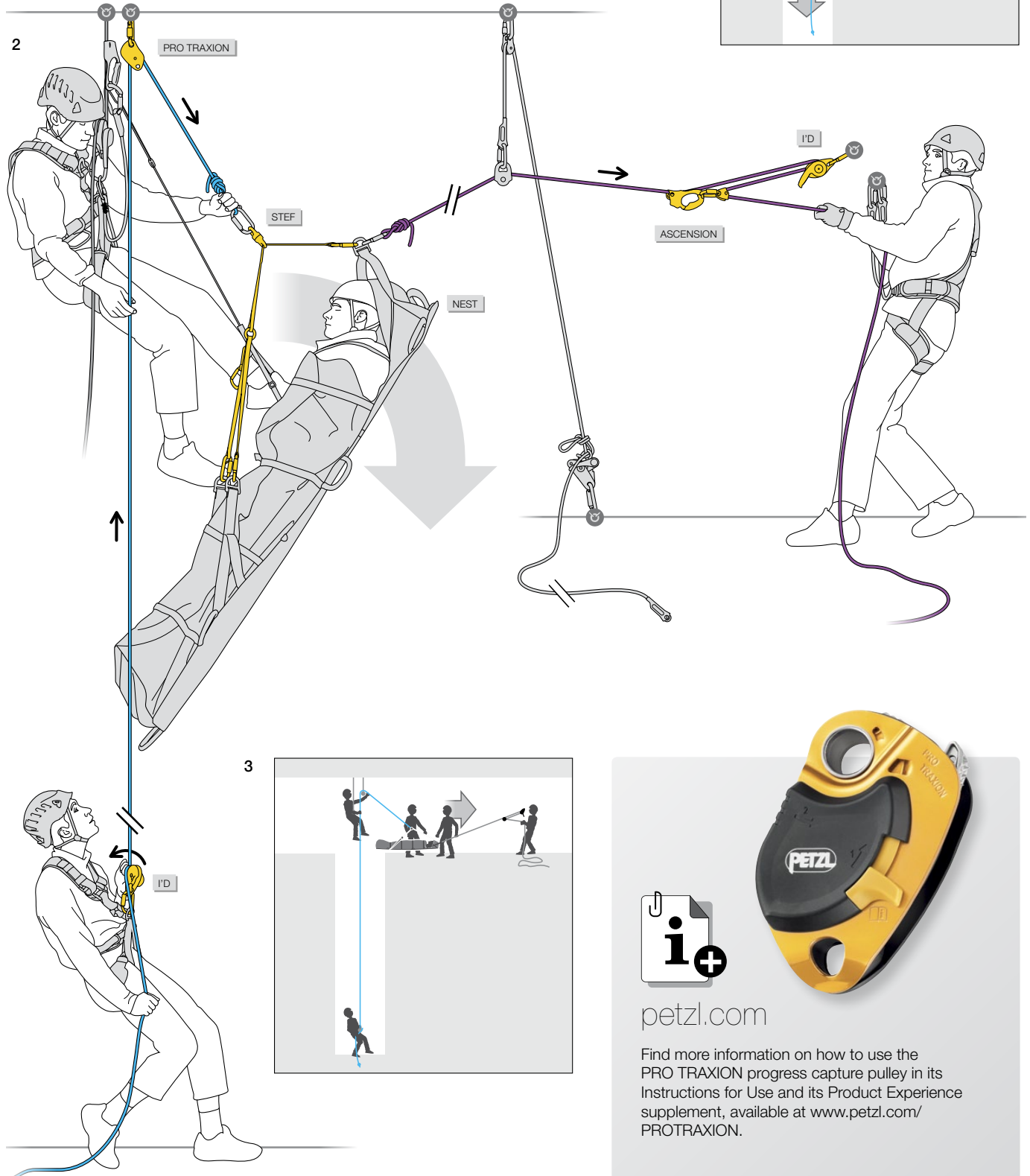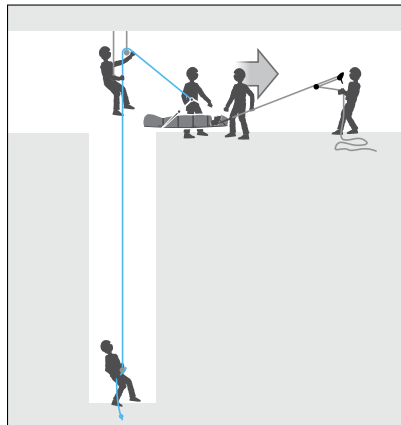
petzl.com

Find more information on how to use the PRO TRAXION progress capture pulley in its Instructions for Use and its Product Experience supplement, available at www.petzl.com/PROTRAXION.

Evacuation by Tyrolean traverse

Backed up rescue system (vertical and horizontal).

KOOTENAY

RESCUCENDER

i'D

RESCUE

RESCUE
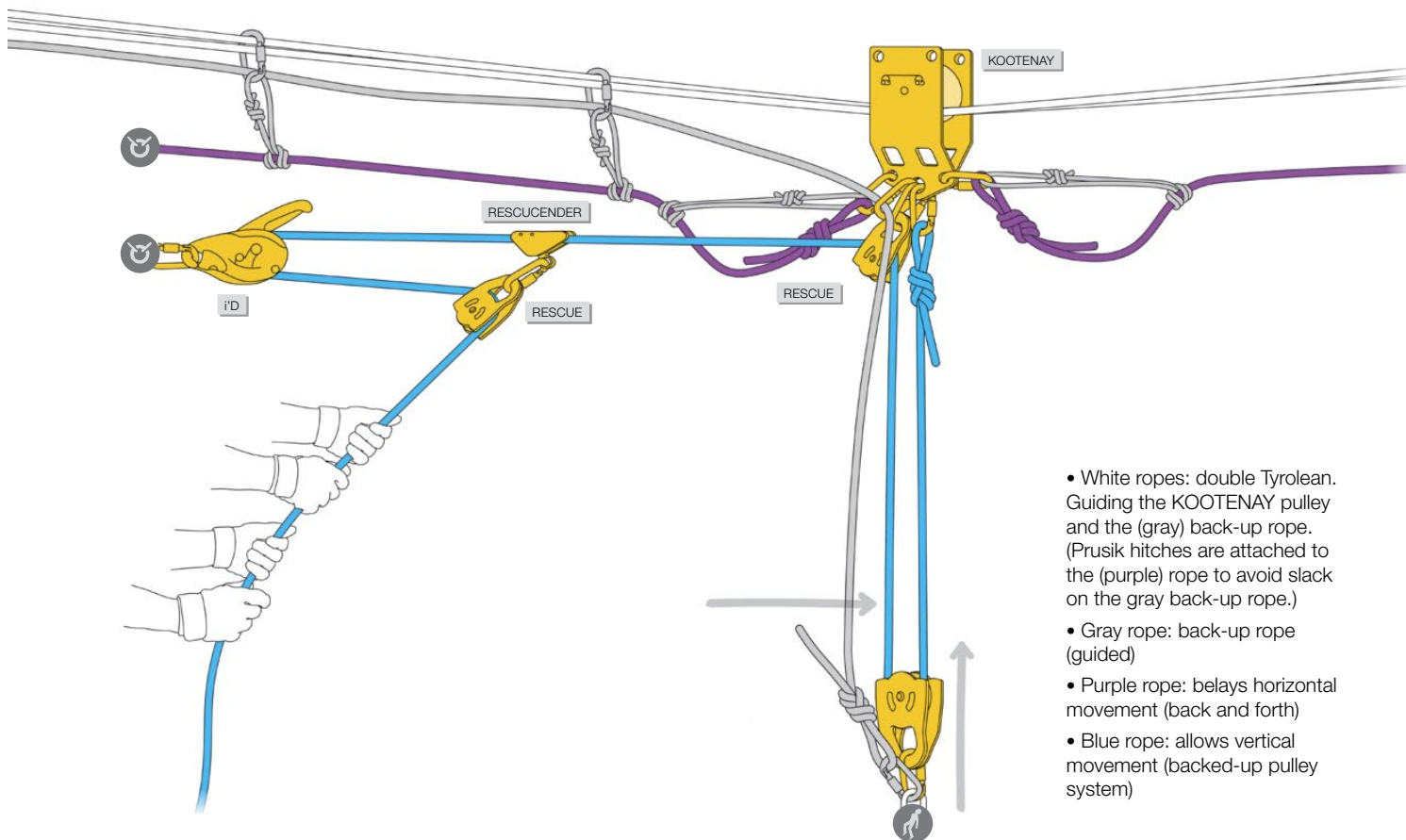
• White ropes: double Tyrolean. Guiding the KOOTENAY pulley and the (gray) back-up rope. (Prusik hitches are attached to the (purple) rope to avoid slack on the gray back-up rope.)

• Gray rope: back-up rope (guided)

• Purple rope: belays horizontal movement (back and forth)

• Blue rope: allows vertical movement (backed-up pulley system)

Evacuation by rope-to-rope transfer

• Alternative to the Tyrolean traverse: this technique requires greater clearance than the Tyrolean as the ropes are less taut. Quick to install with minimal equipment

• Gray rope for back-up belay

• Blue rope for movement

VERTICALITY
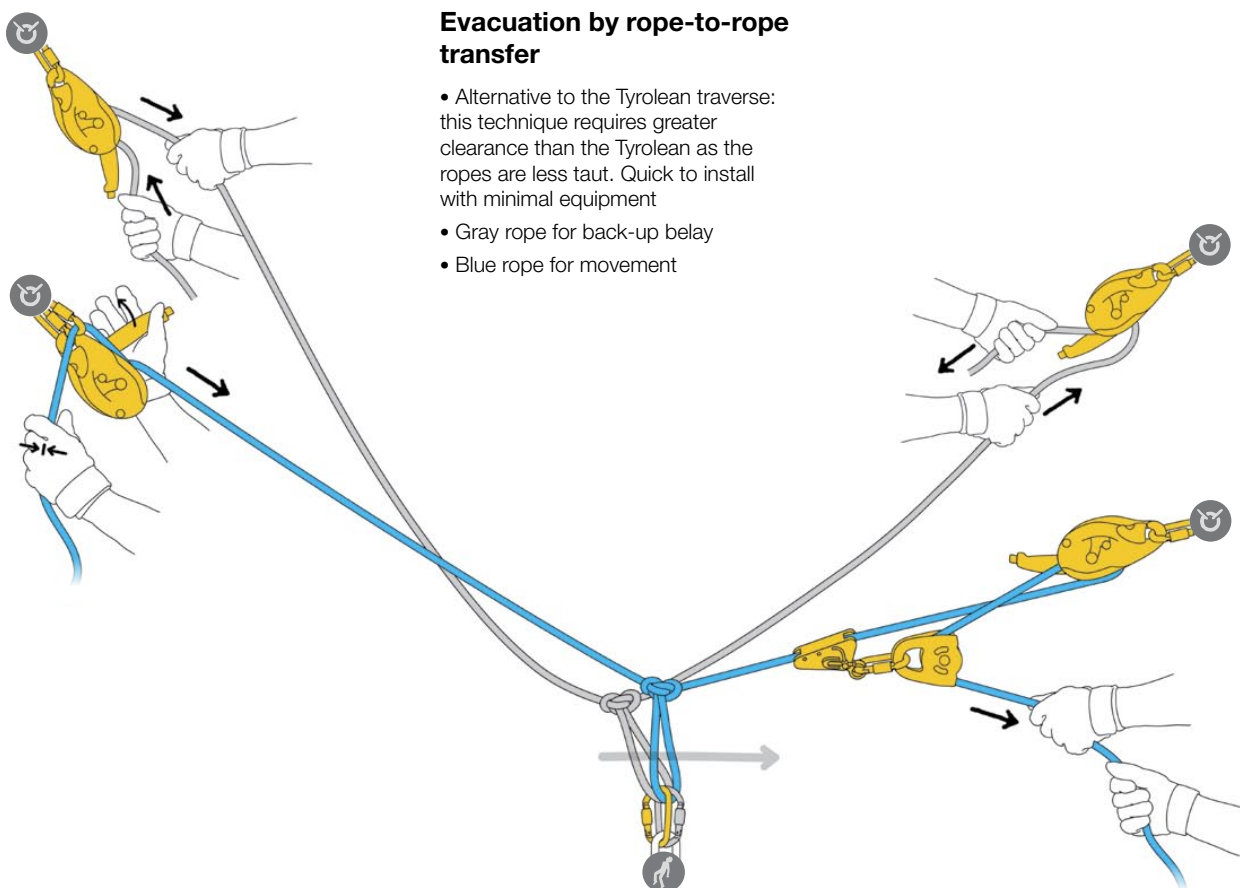
Service des Pistes, Les 7 Laux, Isère, France © Lafouche

If ski lift equipment fails, the person in charge must evacuate passengers according to the evacuation plan. This document explains precisely how all the operations should be carried out and what human and material means must be employed.
The maximum projected time allowed for evacuating all passengers is 3.5 hours. These operations are generally carried out by the operating personnel. In case of difficulty, the operator may call in organized rescue squads. Evacuation of a ski lift requires specific techniques for movement along a cable. For maximum efficiency, these operations are led simultaneously by several independent teams, generally composed of two people (one suspended on the cable for evacuation, the other on the ground to receive the passengers and to guide the movements of his colleague).
The success of these operations hinges largely on the instruction, training and practice of the operating personnel (at least once a year).

AVAO® BOD FAST

The AVAO BOD FAST fall arrest and work positioning harness was designed for greater comfort in use. The X-shaped dorsal construction wraps to reduce pressure points during prolonged suspension. The FAST buckles allow the harness to be donned with both feet on the ground, while retaining its adjustment settings.

ABSORBICA-Y MGO

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 in good 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 under tension on the ROLLCAB, and the GRILLON is slightly slack to allow descent along the cable.

I'D

CONNEXION VARIO

ROLLCAB

BERMUDE

GRILLON

Detail on product kit is found in the rescue bag.

2. Evacuating the passenger

The rescuer descends on the GRILLON to the chair.
He installs the BERMUDE harness on the patient,
then evacuates the patient with his I'D descender.
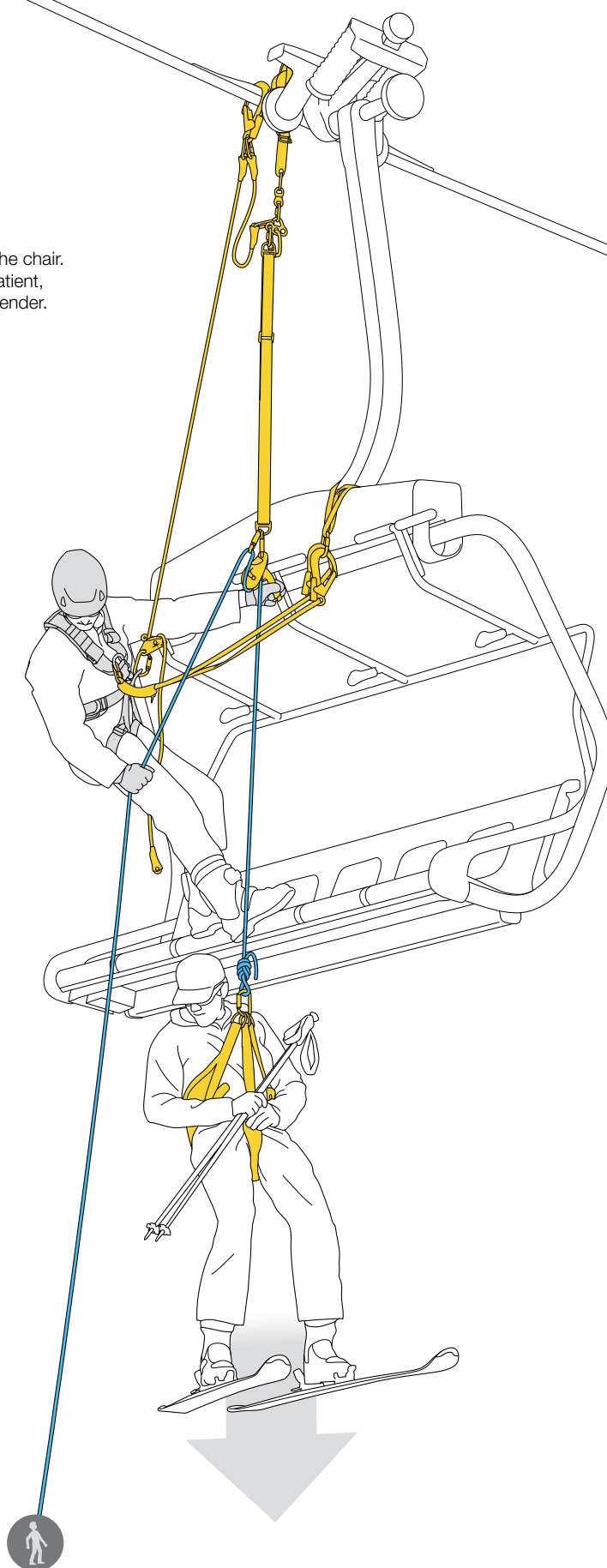
VERTICALITY

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 everyday: repeated and intensive use of equipment, weather, diverse terrain, etc.. They maximize usability, simplicity and ease of use, while meeting the highest quality standard.
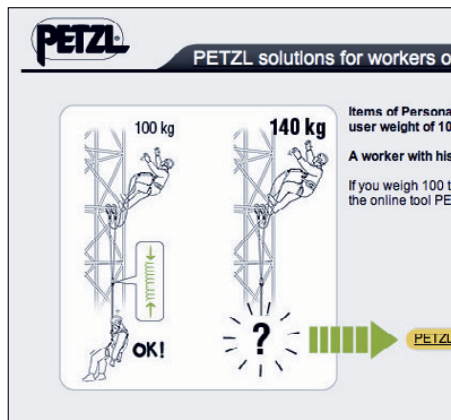
Petzl solutions for workers over 100 kg

Go to www.petzl.com/over100kg to find a tool that proposes equipment solutions for workers weighing 100 to 140 kg according to their weight and equipment.

The tool proposes three solutions:
- reduce the fall height
- increase the absorption capacity of the system
- change nothing when the system's absorption capacity is sufficient
Additional explanations about the strength of equipment, its absorption capacity, as well as the strength of the human body, are also available.

For more information, please consult www.petzl.com/over100kg.

Special products in black

Certain Personal Protective Equipment, such as harnesses, rope clamps for progression, etc. are also available in black.
These versions are designed for professions where being discreet is essential. They are indicated in the product descriptions in this catalog.

Equipment inspection

To ensure the longevity of your equipment, it is necessary to inspect it regularly.

The individual identification code is composed like this: 10271AF0721 (example).

10: year of manufacture
271: day of manufacture in that year
AF: Petzl code related to manufacture
0721: individual identifier

Harnesses

Helmets
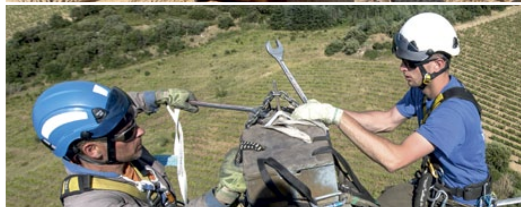
Lanyards and energy absorbers

Mobile fall-arrest device

Connectors

Descenders

Ascenders
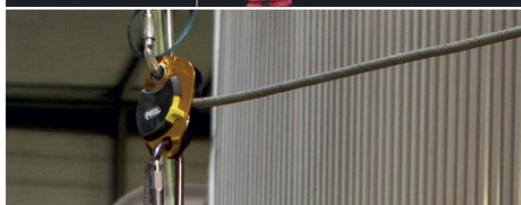
Pulleys

Anchors and ropes

Packs and accessories

Groupe F, Pont du Gard, France © Lafouche

To meet the specific needs of each activity, as well as the different situations encountered in the field, Petzl offers several harness types. These products provide maximum efficiency and security for workers at height. They are simple to use, comfortable and technically adapted to the needs of the tasks for which they are designed. Petzl also offers various accessories that allow supplementary functionality to be integrated into the harness, as well as rescue equipment.

Work positioning and fall arrest harnesses

Versatile and comfortable harnesses for fall arrest and for working in suspension.

| AVAO BOD FAST | AVAO SIT FAST | TOP | TOOLBAG |
| AVAO BOD | AVAO SIT | | |

Harnesses for difficult access

Comfortable harnesses, with integrated ventral rope clamp for ascending rope.

| AVAO BOD CROLL FAST | AVAO SIT FAST | TOP CROLL | PODIUM | TOOLBAG |
| | AVAO SIT | | | |

Tree care harnesses

Comfortable harnesses, with attachment bridge, for greater freedom of movement (triangulation facilitating lateral mobility).

NEW 2014

SEQUOIA SRT

NEW 2014

SEQUOIA

Rescue harnesses

Lightweight and versatile harnesses adapted to different rescue environments.

FALCON

FALCON MOUNTAIN

FALCON ASCENT

Fall arrest harnesses

Simple and easy to don harnesses for fall arrest.

NEWTON FAST JAK

NEWTON

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

VERTICALITY

Strong points of AVAO BOD harnesses

AVAO BOD FAST
AVAO BOD

AVAO BOD CROLL FAST

Find the AVAO harness video presentation at www.petzl.com/AVAO.

Comfort

The dorsal construction of the AVAO is X-shaped to more completely envelop the user. This design optimally distributes pressure in order to ensure great comfort during prolonged suspension.

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

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

Ergonomics

Practical adjustment

The AVAO harness may 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.

To facilitate donning the harness with the feet on the ground or with larger footwear, the AVAO harness is also available with new FAST automatic buckles on the leg loops. Once adjusted, these buckles open and close easily and quickly - the harness can be put on without adjusting all the buckles.

Optimal organization of 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.

Less traumatizing post-fall position

AVAO harnesses are equipped with a dorsal attachment point for connecting a fall arrest system. In case of a fall, the weight of the user is automatically transferred to the leg loops to limit pressure points. This way, the user can remain suspended longer while waiting for rescue.
Warning: Provisions for a rescue plan for each work site should always be made in advance in order to be prepared to rescue a patient as quickly as possible.

AVAO harness   Standard harness

VERTICALITY
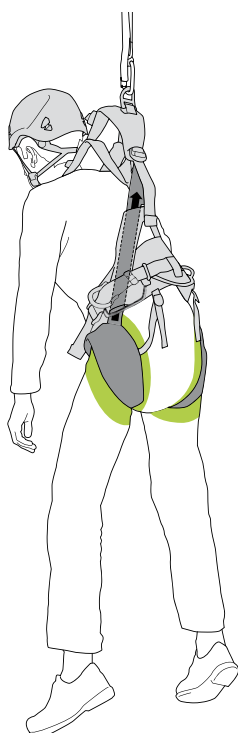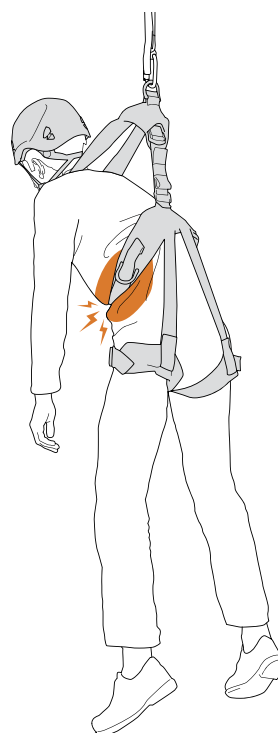
AVAO® BOD

Comfortable fall arrest and work positioning harness

NEW 2014

Shoulder straps with self-locking DoubleBack buckles on each side

X-shaped dorsal construction

Reinforced semi-rigid waistbelt

Leg loops with self-locking DoubleBack buckles or automatic FAST buckles

• Designed for comfort in any situation:
- X-shaped dorsal construction wraps to reduce pressure points during prolonged suspension
- semi-rigid, wide waistbelt and leg loops for excellent positioning; sculpted and lined with breathable perforated foam for comfort during suspension
- foam shoulder straps are widely spaced to reduce neck chafing; when the waistbelt is loaded, they help distribute this load over the shoulders
• Practical adjustment:
- waistbelt and shoulder straps equipped with self-locking DoubleBack buckles for quick and easy adjustment
- available with leg loops equipped with self-locking DoubleBack buckles or FAST buckles for quick and easy opening and closing without the need to readjust them, even while wearing gloves
- fold-away side attachment points prevent accidental snagging

• Facilitates carrying and organization of tools:
- six pre-shaped equipment loops with protective sheath
- four CARITOOL tool holder retainers
- two slots for TOOLBAG tool pouch
• Less traumatizing post-fall position:
- in case of a fall on the dorsal attachment point, the load is distributed over the leg loops, allowing the user to remain suspended longer while awaiting rescue
• Available in versions certified to European standards:
- AVAO BOD (**C71AAA**): leg loops equipped with self-locking DoubleBack buckles
- AVAO BOD FAST (**C71AFA**): leg loops equipped with FAST automatic buckles

• Available in international versions (certified to North American and European standards), with a fall indicator (a red strap appears on the dorsal attachment point after a fall to indicate that the harness should be retired).
- AVAO BOD (**C71AAA U**): leg loops equipped with self-locking DoubleBack buckles
- AVAO BOD FAST (**C71AFA U**): leg loops equipped with FAST automatic buckles
- AVAO BOD FAST black (**C71AFN U**): black, leg loops equipped with FAST automatic buckles

Find all the possibilities of the AVAO harness at www.petzl.com/AVAO.

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

AVAO® SIT

Work positioning seat harness

• Built for comfort:
- semi-rigid, wide waistbelt and leg loops for excellent positioning; sculpted and lined with breathable perforated foam for comfort during suspension
• Practical adjustment:
- waistbelt equipped with self-locking DoubleBack buckles for quick and easy adjustment
- available with leg loops equipped with self-locking DoubleBack buckles or FAST buckles for quick and easy opening and closing without the need to readjust them, even while wearing gloves
- fold-away side attachment points prevent accidental snagging
• Facilitates carrying and organization of tools:
- six pre-shaped equipment loops with protective sheath
- four CARITOOL tool holder retainers
- two slots for TOOLBAG tool pouch
• The rear attachment point on the waistbelt allows connection of a restraint lanyard or a TOP chest harness (new or old version), transforming the harness into a fall arrest harness
• Available in three versions:
- AVAO SIT (**C79AAA**): leg loops equipped with self-locking DoubleBack buckles
- AVAO SIT FAST (**C79AFA**): leg loops equipped with FAST automatic buckles
- AVAO SIT black (**C79AAN**): black, leg loops equipped with self-locking DoubleBack buckles

Find all the possibilities of the AVAO harness at www.petzl.com/AVAO.

TOP

Chest harness for seat harness

• Transforms the AVAO SIT, FALCON and SEQUOIA SRT seat harnesses into fall arrest harnesses
• Joins at the rear buckle and connects to the ventral attachment point
• Foam shoulder straps are widely spaced to reduce neck chafing. When the waistbelt is weighted, they help distribute the load over the shoulders
• Shoulder straps equipped with self-locking DoubleBack buckles for quick and easy adjustment
• Sternal attachment point for connecting a fall arrest system
• Available in two versions:
- TOP (**C81AAA**)
- TOP black (**C81AAN**): color: black

TOOLBAG

Tool pouch

• Allows tools to be organized during suspended work
• Cordlock allows the pouch to be closed easily during transport or when moving about
• Attaches easily to any harness in the AVAO line
• TOOLBAG S (**S47Y S**):
- for smaller tools (measuring tape, pencil, screws/nuts...)
- small size (2.5 liters), 170 g
• TOOLBAG L (**S47Y L**):
- for hand tools (hammer, screwdriver...)
- large size (5 liters), 240 g

AVAO® BOD CROLL FAST
Comfortable harness for rope access

NEW
2014

X-shaped dorsal construction

CROLL ventral rope clamp

Reinforced semi-rigid waistbelt

Leg loops equipped with FAST
automatic buckles
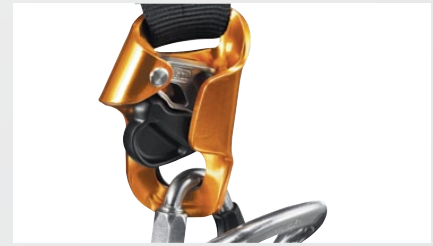
Integrated CROLL ventral rope clamp. The
shoulder-strap/waistbelt connector is equipped
with a captive bar to inhibit connector rotation.

Shoulder straps with self-locking DoubleBack
buckles for easier harness adjustment.

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

• Integrated CROLL ventral rope clamp for
ascending ropes
• Built for comfort:
- X-shaped dorsal construction wraps to reduce
pressure points during prolonged suspension
- semi-rigid, wide waistbelt and leg loops for
excellent positioning; sculpted and lined with
breathable perforated foam for comfort during
suspension
- foam shoulder straps are widely spaced to
reduce neck chafing; when the waistbelt is
loaded, they help distribute this load over the
shoulders
- hooking points for installing a PODIUM seat for
use in prolonged suspension

• Practical adjustment:
- waistbelt and shoulder straps equipped with
self-locking DoubleBack buckles for quick and
easy adjustment
- leg loops equipped with FAST buckles for quick
and easy opening and closing without the need to
readjust them, even while wearing gloves
- fold-away side attachment points prevent
accidental snagging
• Facilitates carrying and organization of tools:
- six pre-shaped equipment loops with protective
sheath
- four CARITOOL tool holder retainers
- two slots for TOOLBAG tool pouch

• Less traumatizing post-fall position:
- in case of a fall on the dorsal attachment point,
the load is distributed over the leg loops, allowing
the user to remain suspended longer while
awaiting rescue
• Available in version certified to European
standards:
- AVAO BOD CROLL FAST (**C71CFA**)
• Available in international versions (certified to
North American and European standards), with
a fall indicator (a red strap appears on the dorsal
attachment point after a fall to indicate that the
harness should be retired).
- AVAO BOD CROLL FAST (**C71CFA U**)
- AVAO BOD CROLL FAST black (**C71CFN U**):
black color

Find all the possibilities of the AVAO harness at
www.petzl.com/AVAO.

PODIUM

TOOLBAG

AVAO® SIT

Work positioning seat harness

• Built for comfort:
- semi-rigid, wide waistbelt and leg loops for excellent positioning; sculpted and lined with breathable perforated foam for comfort during suspension
• Practical adjustment:
- waistbelt equipped with self-locking DoubleBack buckles for quick and easy adjustment
- available with leg loops equipped with self-locking DoubleBack buckles or FAST buckles for quick and easy opening and closing without the need to readjust them, even while wearing gloves
- fold-away side attachment points prevent accidental snagging
• Facilitates carrying and organization of tools:
- six pre-shaped equipment loops with protective sheath
- four CARITOOL tool holder retainers
- two slots for TOOLBAG tool pouch
• The rear attachment point on the waistbelt allows connection of a restraint lanyard, or a TOP CROLL (new or old version) to make the harness into a rope access harness
• Available in three versions:
- AVAO SIT (**C79AAA**): leg loops equipped with self-locking DoubleBack buckles
- AVAO SIT FAST (**C79AFA**): leg loops equipped with FAST automatic buckles
- AVAO SIT black (**C79AAN**): black, leg loops equipped with self-locking DoubleBack buckles

Find all the possibilities of the AVAO harness at www.petzl.com/AVAO.

TOP CROLL C81CAA

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

• Integrates a CROLL ventral rope clamp to transform the AVAO SIT, FALCON, FALCON ASCENT and SEQUOIA SRT harnesses into rope access harnesses
• Joins at the rear buckle and connects to the ventral attachment point with the DELTA directional connector
• Foam shoulder straps are widely spaced to reduce neck chafing. When the waistbelt is weighted, they help distribute the load over the shoulders
• Shoulder straps equipped with self-locking DoubleBack buckles for quick and easy adjustment
• Sternal attachment point for connecting a fall arrest system

PODIUM S70

Podium seat designed for prolonged suspension

• Wide, comfortable sitting position offers excellent stability
• Rigid sides prevent the webbing straps from cutting into the thighs
• Straps are adjustable with self-locking DoubleBack buckles
• Three equipment loops
• Easily positioned on the back when not in use
• Weight: 1170 g

TOOLBAG

Tool pouch

• Allows tools to be organized during suspended work
• Cordlock allows the pouch to be closed easily during transport or when moving about
• Attaches easily to any harness in the AVAO line
• TOOLBAG S (**S47Y S**):
- for smaller tools (measuring tape, pencil, screws/nuts...)
- small size (2.5 liters), 170 g
• TOOLBAG L (**S47Y L**):
- for hand tools (hammer, screwdriver...)
- large size (5 liters), 240 g

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

VERTICALITY

SEQUOIA SRT C69BFA

Tree care seat harness for single rope ascent techniques

NEW
2014
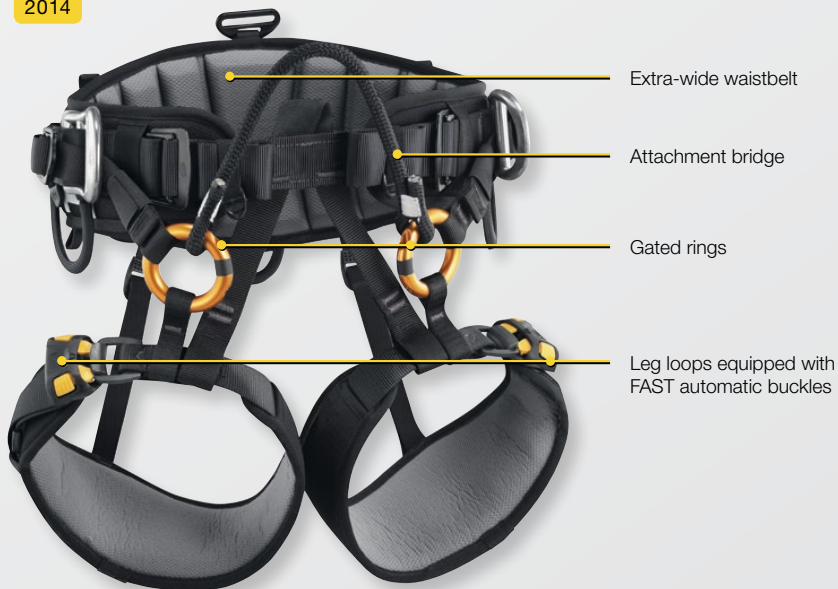
Extra-wide waistbelt

Attachment bridge

Gated rings

Leg loops equipped with FAST automatic buckles

Sculpted waistbelt is lined with perforated foam for improved comfort when suspended
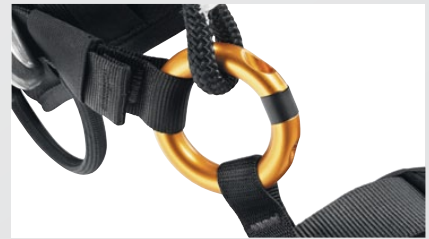
Gated rings for installing an attachment bridge of a different length and attaching accessories directly (RING or SWIVEL)

• Harness designed for ascents on a single rope:
- ventral attachment point and rear buckle for installing a CROLL ventral rope clamp with a SECUR shoulder strap
• Built for comfort:
- semi-rigid, wide waistbelt and leg loops for excellent positioning; sculpted and lined with perforated foam for comfort during suspension
- foam on leg loops can be adjusted for perfect positioning
- mobile side attachment points allow the user to follow the orientation of the lanyard during lateral movement
- attachment bridge improves lateral mobility
• Practical adjustment:
- waistbelt equipped with self-locking DoubleBack buckles for quick and easy adjustment
- leg loops equipped with FAST buckles for quick and easy opening and closing without the need to readjust them, even while wearing gloves
- buckles to adjust weight distribution between the waistbelt and the leg loops
- gated rings to adapt the length of the attachment bridge and to install accessories directly on the attachment bridge (RING, SWIVEL)

• Facilitates carrying and organization of tools:
- seven pre-shaped equipment loops with protective sheath
- five retainers for CARITOOL tool holder
- two retainers for a carabiner to hold a chainsaw or handsaw
- elastic for attaching a first aid kit
• Can be accessorized in order to adapt the harness to its use:
- seat (**S69**)
- shoulder strap (**C69B**)

Find the SEQUOIA harness video presentation at www.petzl.com/SEQUOIA.
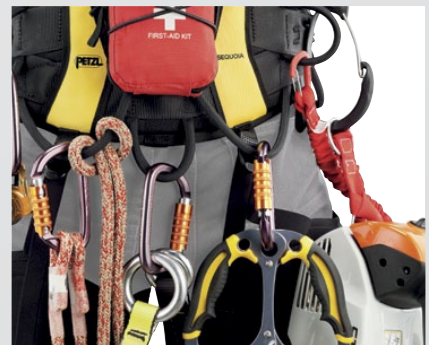
Waistbelt designed to facilitate carrying and organization of tools
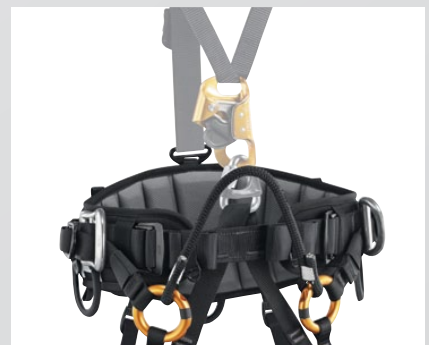
Ventral attachment point and rear buckle for installing a CROLL ventral rope clamp with a SECUR shoulder strap

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

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PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

NEW 2014

Shoulder strap for SEQUOIA harness

NEW 2014

RING S   RING L

NEW 2014

NEW 2014

NEW 2014

Seat for SEQUOIA and SEQUOIA SRT harness

Attachment bridge
for SEQUOIA and SEQUOIA SRT harness

SEQUOIA C69AFA

Tree care seat harness for double rope ascent techniques.

• Built for comfort:
- semi-rigid, wide waistbelt and leg loops for excellent positioning; sculpted and lined with perforated foam for comfort during suspension
- foam on leg loops can be adjusted for perfect positioning
- mobile side attachment points allow the user to follow the orientation of the lanyard during lateral movement
- attachment bridge improves lateral mobility
• Practical adjustment:
- waistbelt and leg loops equipped with FAST buckles for quick and easy opening and closing without the need to readjust them, even while wearing gloves
- buckles to adjust weight distribution between the waistbelt and the leg loops
- gated rings to adapt the length of the attachment bridge and to install accessories directly on the attachment bridge (RING, SWIVEL)
• Facilitates carrying and organization of tools:
- seven pre-shaped equipment loops with protective sheath
- five retainers for CARITOOL tool holder
- two retainers for a carabiner to hold a chainsaw or handsaw
- elastic for attaching a first aid kit
• The seat (S69) may be added

Shoulder strap for SEQUOIA SRT harness C69B

• Takes up the load on the waistbelt to better distribute it over the shoulders
• Shoulder straps are widely spaced to reduce neck chafing
• Connects to the ventral attachment point of the SEQUOIA SRT harness and to the two retainers at the rear of the waistbelt
• DoubleBack self-locking buckle for quick, easy adjustment
• Weight: 280 g

Seat for SEQUOIA and SEQUOIA SRT harness S69

• Wide, comfortable seat for working comfortably during suspension
• Adjustable width to reduce bulk and facilitate movement within the tree.
• Straps adjust with self-locking DoubleBack buckles for quick and easy adjustment
• Easy to position on the back when not in use
• Connects to the two gated rings of the SEQUOIA and SEQUOIA SRT harnesses
• Weight: 950 g
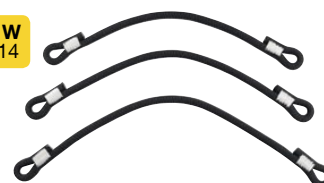
RING

Connection ring

• Installs directly onto the SEQUOIA and SEQUOIA SRT harnesses' attachment bridge to improve the arborist's lateral mobility
• Round shape ensures good positioning of the connection ring when it stops against the gated rings
• Available in two sizes:
- RING S (**C04620**): 40 g
- RING L (**C04630**): 70 g

Attachment bridge for SEQUOIA and SEQUOIA SRT harness C69F

• Offers greater lateral mobility to the arborist
• Connects to the two gated rings of the SEQUOIA and SEQUOIA SRT harnesses
• Available in 3 lengths to adjust the position of progression tools on the bridge:
- 25 cm, 43 g (**C69F 25**)
- 30 cm, 45 g (**C69F 30**)
- 35 cm, 46 g (**C69F 35**)

VERTICALITY

FALCON
Lightweight seat harness for rescue

The waistbelt and leg loops are compact and lightweight for excellent mobility

Textile lateral attachment points for occasional use

• Waistbelt and leg loops lined with breathable perforated foam for maximum comfort
• A ventral attachment point that distributes the load between the waistbelt and the leg loops during suspended work
• Two textile lateral attachment points (for occasional use) transfer the weight evenly around the waistbelt for comfortable surface-supported work
• Textile rear attachment point on the waistbelt for connecting a restraint lanyard
• Rear attachment buckle for attaching the TOP or TOP CROLL chest harness
• Waistbelt and leg loops equipped with two self-locking DoubleBack buckles for quick and easy adjustment
• Four equipment loops: two large rigid ones in front for easy access to gear and two small flexible ones in back that will not interfere with wearing a backpack
• Two slots for CARITOOL tool holder
• Available in two versions:
- FALCON (**C38AAA**)
- FALCON black (**C38AAN**): color: black

The rear buckle allows a TOP chest harness to be attached when winching a load up to a helicopter, or a TOP CROLL chest harness to transform the FALCON into a difficult-access harness

FALCON MOUNTAIN C38CAA
Seat harness for mountain rescue

• Waistbelt and leg loops lined with breathable perforated foam for maximum comfort
• Attachment bridge construction for optimum mobility when progressing with climbing techniques
• Two textile lateral attachment points (for occasional use) transfer the weight evenly around the waistbelt for comfortable surface-supported work
• Textile rear attachment point on the waistbelt for connecting a restraint lanyard
• Waistbelt and leg loops equipped with two self-locking DoubleBack buckles for quick and easy adjustment
• Four equipment loops: two large rigid ones in front for easy access to gear and two small flexible ones in back that will not interfere with wearing a backpack
• Two slots for CARITOOL tool holder

PETZL

HARNESSES

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MOBILE FALL ARRESTERS

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ANCHORS AND ROPES

PACKS AND ACCESSORIES

NEW 2014

OMNI TRIACT-LOCK

OMNI SCREW-LOCK

CHEST'AIR C98A

Chest harness for seat harnesses

• Transforms the 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.
• Textile sternal attachment point does not interfere when not in use
• Ventral straps and shoulder straps equipped with DoubleBack buckles to quickly adapt the chest harness to all body types
• Chest size: 145 cm maximum

FALCON ASCENT C38BAA

Seat harness, efficient for rope ascents

• Waistbelt and leg loops lined with breathable perforated foam for maximum comfort
• Two-part ventral attachment point increases the efficiency of rope ascents when using a CROLL ventral rope clamp
• Two textile lateral attachment points (for occasional use) transfer the weight evenly around the waistbelt for comfortable surface-supported work
• Textile rear attachment point on the waistbelt for connecting a restraint lanyard
• Harness can be used with the CROLL ventral rope clamp, in combination with the SECUR shoulder strap or the TOP CROLL chest harness (connection point at rear of harness)
• Waistbelt and leg loops equipped with two self-locking DoubleBack buckles for quick and easy adjustment
• Four equipment loops: two large rigid ones in front for easy access to gear and two small flexible ones in back that will not interfere with wearing a backpack
• Two slots for CARITOOL tool holder

OMNI

Multi-directional semi-circle carabiner

• Multi-directional carabiner for:
- fastening the NEWTON and FALCON ASCENT harnesses by joining the two attachment points
- connecting a fall arrest system (NEWTON) or a CROLL ventral rope clamp (FALCON ASCENT)
• Strength: 15 kN (in all directions)
• Keylock system helps prevent snagging of the carabiner during maneuvers
• Red indicator provides a visual warning when the carabiner is unlocked (on SCREW-LOCK version)
• Two locking systems available:
- OMNI (**M37 TL**): TRIACT-LOCK
- OMNI (**M37 SL**): SCREW-LOCK
• Also available in black:
- OMNI (**M37 TLN**): TRIACT-LOCK black
- OMNI (**M37 SLN**): SCREW-LOCK black

VERTICALITY

NEWTON FAST JAK C73JF0

Basic fall arrest harness is compatible with JAK vest

Pre-shaped JAK vest

Two-part sternal attachment point

Equipment loop

Automatic FAST buckles

The JAK vest and the automatic FAST buckles make the harness easy to put on

The two-part sternal attachment point is used with the semi-circular OMNI carabiner

• JAK vest facilitates proper donning of the harness
• FAST automatic buckles on leg loops allow the harness to be put on easily with both feet on the ground
• A sternal and a dorsal attachment point for connecting a fall arrest system
• Shoulder straps equipped with self-locking DoubleBack buckles for quick and easy adjustment
• Two equipment loops with protective sheath
• Work positioning on the lateral attachment points is possible with the PAD FAST waistbelt
• Upright descent with the help of the LIFT spreader
• Also available in a black version without dorsal attachment point: NEWTON FAST JAK STERNAL (**C73JFN**)
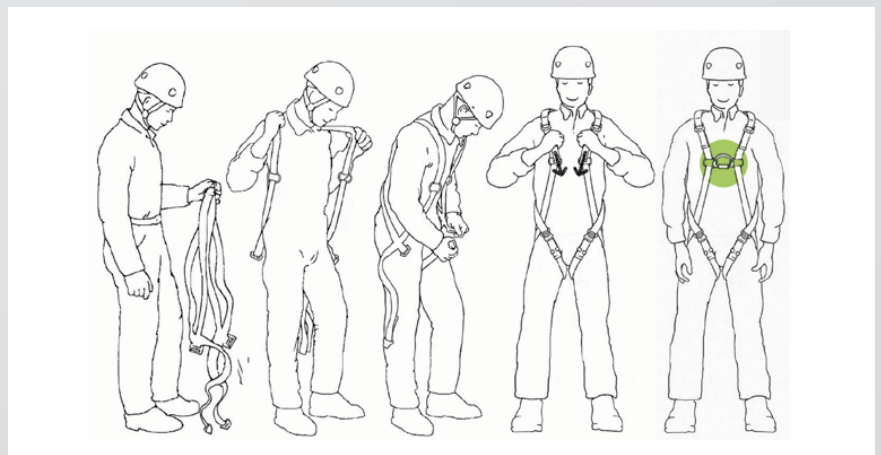
The harness can be donned with both feet on the ground, while retaining its adjustment settings, thanks to the two-part attachment point and FAST buckles

LIFT

PAD FAST

OMNI TRIACT-LOCK

OMNI SCREW-LOCK

JAK

NEWTON C73000

Basic modular fall arrest harness

• Upper and lower straps are different colors to facilitate donning the harness correctly
• A sternal and a dorsal attachment point for connecting a fall arrest system
• Shoulder straps equipped with self-locking DoubleBack buckles for quick and easy adjustment
• Two equipment loops with protective sheath
• Work positioning on the lateral attachment points is possible with the PAD FAST waistbelt
• Upright descent with the help of the LIFT spreader

OMNI

Multi-directional semi-circle carabiner

• Multi-directional carabiner for:
- fastening the NEWTON and FALCON ASCENT harnesses by joining the two attachment points
- connecting a fall arrest system (NEWTON) or a CROLL ventral rope clamp (FALCON ASCENT)
• Strength: 15 kN (in all directions)
• Keylock system helps prevent snagging of the carabiner during maneuvers
• Red indicator provides a visual warning when the carabiner is unlocked (on SCREW-LOCK version)
• Two locking systems available:
- OMNI (**M37 TL**): TRIACT-LOCK
- OMNI (**M37 SL**): SCREW-LOCK
• Also available in black:
- OMNI (**M37 TLN**): TRIACT-LOCK black
- OMNI (**M37 SLN**): SCREW-LOCK black

LIFT L54

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

• Triangular carabiners for easier insertion into harness slots
• Rigid structure keeps its shape around the head
• Weight: 520 g
• Certification(s): CE

PAD FAST

Work positioning waistbelt for NEWTON harness

• Transforms the basic fall arrest harness into a work positioning and fall arrest harness
• Comfortable for work positioning with the feet supported against a surface
• Two lateral attachment points
• FAST automatic buckle for easy and quick opening and closing without the need to readjust
• Certification(s): CE EN 358
• Available in three sizes:
- size 0 (**C89 0F**): 60 -95 cm (344 g)
- size 1 (**C89 1F**): 75 -105 cm (387 g)
- size 2 (**C89 2F**): 95 -120 cm (417 g)

JAK

Pre-shaped vest makes it easier to don the NEWTON harness

• Keeps the shape of the harness, ready to don
• Attaches with loops and Velcro patches
• Breathable mesh fabric
• Available in two sizes:
- size 1 (**C73101 1**): 250 g
- size 2 (**C73101 2**): 290 g

VERTICALITY

The NEST litter was developed in partnership with the French National Caving Rescue Association. It is therefore ideal for all technical rope rescue, particularly in confined spaces.

Evacuation triangles are mainly used for rescue, on ski lifts and by firefighters. They are used to evacuate unequipped people as quickly as possible.

STEF

NEST

PITAGOR

BERMUDE

NEST S61

Litter for confined spaces

• Allows the patient to be transported horizontally, vertically or at an angle, to adapt to irregular or narrow terrain
• Litter has a complete body harness integrated in it to secure the patient. Color coded to avoid any installation error.
• DoubleBack self-locking buckles for quick, easy adjustment
• Smooth, rigid plastic bottom ensures good sliding
• Foam padding provides comfort for the patient's back
• Rigid stays can be removed to reduce bulk when accessing accident site
• Optional accessory: STEF inclination device allows the litter to be easily tilted according to the terrain
• Weight: 12.8 kg
• Dimensions: 200 x 50 x 5 cm

STEF S59

Inclination device for NEST litter

• Allows the litter to be easily tilted according to the terrain
• TRIACT-LOCK directional connectors automatically lock the three connection points
• Swivel allows the litter to be precisely oriented
• SPIRIT carabiner integrated for fixing the litter in horizontal position
• Weight: 600 g

PITAGOR C80 BR

Evacuation triangle with shoulder straps

• Shoulder straps make it easy to put on
• Adjusts quickly and easily on the patient with self-locking DoubleBack buckles
• Certification(s): EN 1497, EN 1498
• Weight: 1290 g

BERMUDE C80

Evacuation triangle without shoulder straps

• Easy and quick to install (even on a sitting person)
• Adapts to different builds without adjustment (many position options on attachment points)
• Certification(s): CE EN 1498
• Weight: 795 g

NEW 2014

RING OPEN P28

Multi-directional gated ring

• Ring designed for semi-permanent connection of the equipment to the harness
• Round shape ensures optimal functioning in all directions
• Wide opening allows installation of ropes with sewn terminations
• Weight: 70 g
• Certification(s): CE

TOOLBAG

Tool pouch

• Allows tools to be organized during suspended work
• Cordlock allows the pouch to be closed easily during transport or when moving about
• Attaches easily to any harness in the AVAO line
• TOOLBAG S (**S47Y S**):
- for smaller tools (measuring tape, pencil, screws/nuts...)
- small size (2.5 liters), 170 g
• TOOLBAG L (**S47Y L**):
- for hand tools (hammer, screwdriver...)
- large size (5 liters), 240 g

CARITOOL

Tool holder

• Tools accessed and organized with one hand
• Flat top aids in sorting attached gear
• Small hole on top for attaching keeper cord, to prevent dropping critical gear
• Slips through the waistbelt slots or along the harness webbing and stays in place, thanks to its stabilizing clip
• Available in two sizes:
- CARITOOL (**P42**):
maximum load: 5 kg, weight: 25 g
- CARITOOL L (**P42 L**):
maximum load: 15 kg, weight: 60 g

Note: This tool holder is not PPE.

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

			European version		International version		
			reference	certification	reference	certification	
AVAO BOD		AVAO BOD	C71AAA 0	CE EN 361 CE EN 358 CE EN 813	C71AAA 0U	ANSI Z359.1 NFPA 1983 Class III CSA Z259.10 CE EN 361 CE EN 358 CE EN 813	
			C71AAA 1		C71AAA 1U		
			C71AAA 2		C71AAA 2U		
		AVAO BOD FAST	C71AFA 0		C71AFA 0U / C71AFN 0U		
			C71AFA 1		C71AFA 1U / C71AFN 1U		
			C71AFA 2		C71AFA 2U / C71AFN 2U		
		AVAO BOD CROLL FAST	C71CFA 0	CE EN 361 CE EN 358 CE EN 813 CE EN 12841 type B	C71CFA 0U / C71CFN 0U	ANSI Z359.1 CSA Z259.10 CE EN 361 CE EN 358 CE EN 813 CE EN 12841 type B	
			C71CFA 1		C71CFA 1U / C71CFN 1U		
			C71CFA 2		C71CFA 2U / C71CFN 2U		
AVAO SIT		AVAO SIT	C79AAA 1 / C79AAN 1	CE EN 358 CE EN 813	–	–	
			C79AAA 2 / C79AAN 2				
		AVAO SIT FAST	C79AFA 0				
			C79AFA 1				
			C79AFA 2				
TOP		TOP	C81AAA / C81AAN	CE EN 361 (with an AVAO SIT, NAVAHO SIT, FALCON, SEQUOIA SRT seat harness)	–	–	
		TOP CROLL	C81CAA	CE EN 361 (with a AVAO SIT, NAVAHO SIT, FALCON, FALCON ASCENT, SEQUOIA SRT seat harness) CE EN 12841 type B	–	–	
SEQUOIA		SEQUOIA SRT	C69BFA 1	CE EN 358 CE EN 813	–	–	
			C69BFA 2				
		SEQUOIA	C69AFA 1				
			C69AFA 2				
FALCON		FALCON	C38AAA 1 / C38AAN 1	CE EN 358 CE EN 813	–	–	
			C38AAA 2 / C38AAN 2				
		FALCON MOUNTAIN	C38CAA 1	CE EN 813 CE EN 358 CE EN 12277 type C			
			C38CAA 2				
		FALCON ASCENT	C38BAA 1	CE EN 813 CE EN 358			
			C38BAA 2				
CHEST'AIR			C98A	CE EN 361 (with a FALCON, FALCON MOUNTAIN, AVAO SIT, SEQUOIA SRT seat harness) CE EN 12277 type D	–	–	
NEWTON		NEWTON FAST JAK	C73JF0 0	CE EN 361	–	–	
			C73JF0 1 / C73JFN 1S				
			C73JF0 2 / C73JFN 2S				
		NEWTON	C73000 1				
			C73000 2				

Attachment point				Size			Weight
dorsal	sternal	ventral	lateral	Waistbelt	Leg loops	Stature	
●	●	●	●	60 - 90 cm	45 - 65 cm	160 - 180 cm	2055 g
●	●	●	●	70 - 110 cm	45 - 65 cm	165 - 185 cm	2100 g
●	●	●	●	80 - 130 cm	60 - 75 cm	175 - 200 cm	2180 g
●	●	●	●	60 - 90 cm	45 - 65 cm	160 - 180 cm	2145 g
●	●	●	●	70 - 110 cm	45 - 65 cm	165 - 185 cm	2190 g
●	●	●	●	80 - 130 cm	60 - 75 cm	175 - 200 cm	2270 g
●	●	●	●	60 - 90 cm	45 - 65 cm	160 - 180 cm	2330 g
●	●	●	●	70 - 110 cm	45 - 65 cm	165 - 185 cm	2375 g
●	●	●	●	80 - 130 cm	60 - 75 cm	175 - 200 cm	2455 g
–	–	●	●	70 - 110 cm	45 - 65 cm	-	1125 g
–	–	●	●	80 - 130 cm	60 - 75 cm	-	1140 g
–	–	●	●	60 - 90 cm	45 - 65 cm	-	1200 g
–	–	●	●	70 - 110 cm	45 - 65 cm	-	1215 g
–	–	●	●	80 - 130 cm	60 - 75 cm	-	1230 g
–	●	–	–	-	-	160 - 200 cm	660 g
–	●	–	–	-	-	160 - 200 cm	880 g
–	–	●	●	70 - 100 cm	50 - 65 cm	-	1530 g
–	–	●	●	85 - 120 cm	60 - 75 cm	-	1590 g
–	–	●	●	65 - 100 cm	50 - 65 cm	-	1390 g
–	–	●	●	85 - 120 cm	60 - 75 cm	-	1450 g
–	–	●	●	70 - 120 cm	50 - 65 cm	-	840 g
–	–	●	●	80 - 140 cm	60 - 75 cm	-	930 g
–	–	●	●	70 - 120 cm	50 - 65 cm	-	795 g
–	–	●	●	80 - 140 cm	60 - 75 cm	-	830 g
–	–	●	●	70 - 120 cm	50 - 65 cm	-	780 g
–	–	●	●	80 - 140 cm	60 - 75 cm	-	800 g
–	●	–	–	-	-	-	495 g
●	●	–	–	68 - 95 cm	45 - 60 cm	165 - 180 cm	960 g
● / –	●	–	–	75 - 104 cm	53 - 66 cm	173 - 187 cm	1020 g / 890 g
● / –	●	–	–	97 - 125 cm	55 - 75 cm	180 - 194 cm	1070 g / 930 g
●	●	–	–	75 - 104 cm	53 - 66 cm	173 - 187 cm	780 g
●	●	–	–	97 - 125 cm	55 - 75 cm	180 - 195 cm	810 g

VERTICALITY

EEE – OMEXOM, ligne à 2 x 400 kV Baixas – Gaudiére, La Tour de France, Pyrénées Orientales, France © Sam Blé / Lafouche

CenterFit adjustment

The headband is adjusted with the simultaneous action of 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.
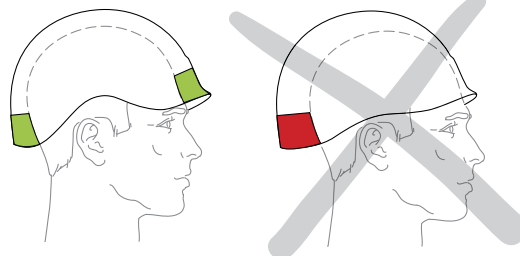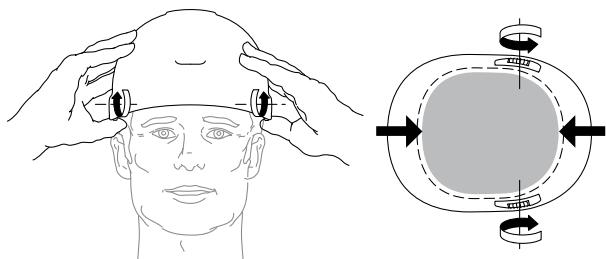
Adding accessories

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 ULTRA VARIO headlamp, and four positioning hooks for mounting a headlamp with an elastic headband.

PIXA

ULTRA VARIO

VIZIR

VIZIR SHADOW

VIZEN
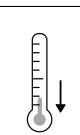
VERTEX / ALVEO

Personalizing

Each user can adapt his/her VERTEX or ALVEO helmet according to the need:
• **Sheet of transparent stickers:** allows the user to display a personal marking on the helmet
• **Sheet 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 do not absorb perspiration

VERTICALITY

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

		VERTEX BEST	ALVEO BEST	VERTEX BEST DUO LED 14	VERTEX VENT	ALVEO VENT	VERTEX ST
Protection against mechanical impacts	EN 397	●			●		●
	EN 12492	●			●		●
Ventilation	EN 12492	–			●		–
Protection against electrical risks	EN 397	●		–	–		●
	EN 50365	●		–	–		●
Limited risk of choking in case of helmet snagging	EN 397	–			–		●(1)
Limited risk of losing helmet during 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
US 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 certifications:		CSA Z94.1-05 type 1 Class E (3)	-		- (4)		-

(1) Chin strap designed to release if snagged (strength less than 25 daN).
(2) Chin strap limits risk of losing helmet during a fall (strength greater than 50 daN).
(3) See product guide.
(4) ALVEO VENT is also UIAA certified.

VERTEX

VERTEX helmets have a six-point webbing suspension system for maximum comfort on the head. Shock absorption achieved through deformation of the outer shell
Weight: 455 g

Comfortable helmets
• For work at height and rescue

Helmets with mesh headband for optimal comfort and a strong chin strap.

NEW 2014

NEW 2014

NEW 2014

VERTEX BEST

VERTEX BEST DUO LED 14

VERTEX VENT

• For industrial use

Helmets with mesh headband for optimal comfort and a strong chin strap designed to release when snagged.

NEW 2014

VERTEX ST

ALVEO

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

Lightweight helmets
• For work at height and rescue

Helmet with expanded polystyrene liner for less weight and a strong chin strap.

ALVEO BEST

ALVEO VENT

VERTEX and ALVEO helmet accessories

VIZIR

NEW 2014

VIZIR SHADOW

VIZEN

Absorbent foam

Replacement foams

Transparent stickers
Reflective stickers

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

VERTICALITY

VERTEX® BEST

Comfortable helmet for work at height and rescue

NEW 2014

Slot for mounting PIXA or ULTRA VARIO headlamp

Adjustable and removable chinstrap

Headband is adjustable by simultaneous action of the two adjustment wheels, even with gloves on. The CenterFit system allows the helmet to be perfectly centered on the head

Chinstrap is easily removed for changing or cleaning

The chinstrap and buckle closure are designed to limit the risk of losing the helmet in case of a fall

Go to www.petzl.com/VERTEX for the video featuring the helmet and its accessories.

• Optimal protection for work at height:
- shock absorption achieved through deformation of the outer shell
- closed shell for protection against electrical risk and molten metal splash
- strong chinstrap (greater than 50 daN) limits the risk of losing the helmet during a fall
• Very comfortable to wear:
- six-point mesh headband conforms perfectly to the shape of the head
- CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head
- comes with two sizes of headband foam
• Many accessories are available in order to adapt the helmet to its use:
- PIXA or ULTRA VARIO headlamp (front and back slots)
- headlamp with elastic headband (positioning clips)
- VIZIR, VIZIR SHADOW or VIZEN protective shield (lateral inserts)
- hearing protection (side slots)

• Rugged, low-maintenance helmet:
- coated straps resist dirt
- chinstrap is easily removed for changing or cleaning
• Replacement chinstrap available:
- standard version (**A10300**)
- version for black VERTEX BEST (**A10310**)
• Size: 53-63 cm
• Weight: 455 g
• Available in versions certified for European and United States standards, available in six colors:
- VERTEX BEST (**A10BYB**): yellow
- VERTEX BEST (**A10BWB**) : white
- VERTEX BEST (**A10BRB**): red
- VERTEX BEST (**A10BNB**): black
- VERTEX BEST (**A10BOB**): orange
- VERTEX BEST (**A10BBB**): blue
• Versions certified for European, United States and Canadian standards, available in six colors:
- VERTEX BEST (**A10BYD**): yellow
- VERTEX BEST (**A10BWD**): white
- VERTEX BEST (**A10BRD**): red
- VERTEX BEST (**A10BND**): black
- VERTEX BEST (**A10BOD**): orange
- VERTEX BEST (**A10BBD**) : blue

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

NEW 2014

NEW 2014

NEW 2014

VERTEX® BEST
DUO LED 14 A10BWF

Comfortable helmet with integrated hybrid lighting

• VERTEX BEST helmet with durable headlamp that is waterproof to -5 meters (IP X8)
• Choose between two powerful light sources, according to the situation:
- focused, distance lighting has adjustable zoom with halogen bulb
- close-range lighting with three lighting modes (maximum, optimum, economic) and a long burn time, with 14 LEDs for a constant level of lighting until the batteries are almost discharged
• Comfortable and practical:
- on/off switch locks to prevent inadvertently turning on the headlamp
- light body can be tilted
- spare halogen bulb in the head of the lamp
• Replacement chinstrap available (**A10300**)
• Size: 53-63 cm
• Weight: 625 g including batteries

Find all lighting performance information for the DUO LED 14 headlamp on page 147.

VERTEX® VENT

Comfortable ventilated helmet for work at height and rescue

• Excellent protection for work at height:
- shock absorption achieved through deformation of the outer shell
- strong chinstrap (greater than 50 daN) limits the risk of losing the helmet during a fall
• Very comfortable to wear:
- six-point mesh headband conforms perfectly to the shape of the head
- CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head
- vent holes with sliding shutters allow the ventilation to be adjusted while wearing the helmet.
- comes with two sizes of headband foam
• Many accessories are available in order to adapt the helmet to its use:
- PIXA or ULTRA VARIO headlamp (front and back slots)
- headlamp with elastic headband (positioning clips)
- VIZIR, VIZIR SHADOW or VIZEN protective shield (lateral inserts)
- hearing protection (side slots)
• Rugged, low-maintenance helmet:
- coated straps resist dirt
- chinstrap is easily removed for changing or cleaning
• Replacement chinstrap available:
- standard version (**A10300**)
- version for black VERTEX VENT (**A10310**)
• Size: 53-63 cm
• Weight: 455 g
• Available in six colors:
- VERTEX VENT (**A10VYB**): yellow
- VERTEX VENT (**A10VWB**): white
- VERTEX VENT (**A10VRB**): red
- VERTEX VENT (**A10VNB**): black
- VERTEX VENT (**A10VOB**): orange
- VERTEX VENT (**A10VBB**): blue

VERTEX® ST

Comfortable helmet for industry

• Optimal protection for industry:
- shock absorption achieved through deformation of the outer shell
- its closed shell offers protection against electrical risk and molten metal splash
- limits risk of choking, thanks to a chinstrap designed to release if snagged (strength less than 25 daN)
• Very comfortable to wear:
- six-point mesh headband conforms perfectly to the shape of the head
- CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head
- chinstrap can be removed when not in use
- comes with two sizes of headband foam
• Many accessories are available in order to adapt the helmet to its use:
- PIXA or ULTRA VARIO headlamp (front and back slots)
- headlamp with elastic headband (positioning clips)
- VIZIR, VIZIR SHADOW or VIZEN protective shield (lateral inserts)
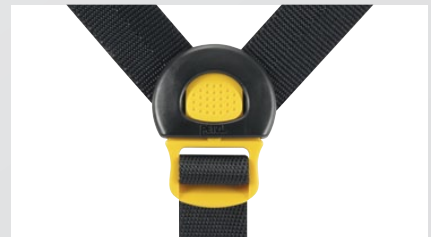- hearing protection (side slots)
• Rugged, low-maintenance helmet:
- coated straps resist dirt
- chinstrap is easily removed for changing or cleaning
• Replacement chinstrap available (**A10320**)
• Size: 53-63 cm
• Weight: 455 g
• Available in two colors:
- VERTEX ST (**A10SWB**): white
- VERTEX ST (**A10SRB**): red

ALVEO VENT

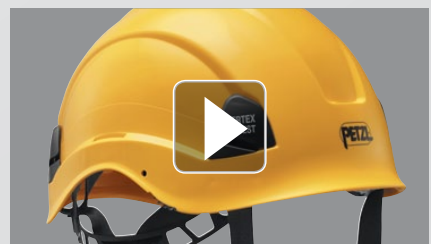**Ventilated helmet for work at height and rescue**

Headband is adjustable by simultaneous action of the two adjustment wheels, even with gloves on. The CenterFit system allows the helmet to be perfectly centered on the head

Slot for mounting PIXA or ULTRA VARIO headlamp

The chinstrap and buckle closure are designed to limit the risk of losing the helmet in case of a fall

Adjustable chinstrap

Go to www.petzl.com/ALVEO for the video featuring the helmet and its accessories.

• Excellent protection for work at height:
- shock is absorbed by deformation of the expanded polystyrene liner
- strong chinstrap (greater than 50 daN) limits the risk of losing the helmet during a fall
• Built for reduced weight
• Comfortable to wear:
- CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head
- ventilation holes allow air to pass through the helmet
- comes with two sizes of headband foam

• Many accessories are available in order to adapt the helmet to its use:
- PIXA or ULTRA VARIO headlamp (front and back slots)
- headlamp with elastic headband (positioning clips)
- VIZIR, VIZIR SHADOW or VIZEN protective shield (lateral inserts)
- hearing protection (side slots)
• Size: 53-63 cm
• Weight: 340 g
• Available in three colors:
- ALVEO VENT (**A20VYA**): yellow
- ALVEO VENT (**A20VWA**): white
- ALVEO VENT (**A20VRA**): red

Contains Alveolen® of Sekisui Alveo AG.

VIZIR

NEW 2014

VIZIR SHADOW

VIZEN

Transparent stickers

Reflective stickers

Absorbent foam

Replacement foams

ALVEO BEST

Lightweight helmet for work at height and rescue

• Optimal protection for work at height:
- shock is absorbed by deformation of the expanded polystyrene liner
- unventilated shell (no holes) for protection against electrical risk and molten metal splash
- strong chinstrap (greater than 50 daN) limits the risk of losing the helmet during a fall
• Built for reduced weight
• Comfortable to wear:
- CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head
- comes with two sizes of headband foam
• Many accessories are available in order to adapt the helmet to its use:
- PIXA or ULTRA VARIO headlamp (front and back slots)
- headlamp with elastic headband (positioning clips)
- VIZIR, VIZIR SHADOW or VIZEN protective shield (lateral inserts)
- hearing protection (side slots)
• Size: 53-63 cm
• Weight: 350 g
• Available in three colors:
- ALVEO BEST (**A20BYA**): yellow
- ALVEO BEST (**A20BWA**): white
- ALVEO BEST (**A20BRA**): red

Contains Alveolen® of Sekisui Alveo AG.

VIZIR A15A

Protective eye shield for VERTEX and ALVEO helmets

• Mounting inserts for easy installation on VERTEX (2011 version and later) and ALVEO helmets
• Pivots quickly from work position to storage position on top of the helmet
• Scratch- and fog-resistant
• Weight: 65 g
• Certification(s): CE EN 166, 1B, ANSI Z87.1-2010

VIZIR SHADOW A15AS

Tinted eye shield for VERTEX and ALVEO helmets

• Technical specifications identical to those for the VIZIR
• Level 2.5 solar protection filter protects the eyes from sun
• Additional certification: CE EN 172, 5-2.5

VIZEN A14

Eye shield with electrical protection for VERTEX and ALVEO helmets

• Ultra-wrap shield completely protects face against dangers of an electric arc
• Mounting inserts for easy installation on VERTEX (2011 version and later) and ALVEO helmets
• Pivots quickly from work position to storage position on top of the helmet
• Scratch- and fog-resistant
• Weight: 180 g
• Certification(s):
- CE EN 166, 1BT8
- CE EN 170, 2C-1,2
- ANSI Z87.1-2010
- GS ET-29, Class 1

Transparent stickers A10100

• Page of 36 transparent stickers for personalizing VERTEX and ALVEO helmets
• Marking with permanent marker or laser printer

Reflective stickers

• Page of four pre-cut reflective stickers for increased visibility
• Available in two versions:
- for VERTEX helmet (**A10110**)
- for ALVEO helmet (**A20110**)

Absorbent foam

• Comfort foam absorbs perspiration
• Needs regular maintenance
• Machine washable
• Weight: 15 g
• Available in two versions:
- for VERTEX helmet (**A10200**)
- for ALVEO helmet (**A20200**)

Replacement foams

• Standard replacement foams:
- regular foam covers most head sizes
- thick foam covers smaller head sizes
• Easy maintenance
• Weight: 15 g
• Available in two versions:
- for VERTEX helmet (**A10210**)
- for ALVEO helmet (**A20210**)

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

Trabajos en Alturas, Xcaret Park, Riviera Maya, Playa del Carmen, México © Marcos Ferro

There are two main types of lanyards:
• adjustable positioning lanyards for precise and comfortable positioning at a work station
• lanyards with an energy absorber designed to limit the impact force transmitted to the user in case of a fall

The Petzl lanyard range also includes specialized lanyards for specific uses:
• progression lanyards for difficult access
• positioning lanyards for tree care
• lanyards with energy absorber for the ASAP mobile fall arrester

Sewn terminations

Sewn terminations on rope lanyards give an increase in strength (compared to a knotted termination) while reducing bulk.

Plastic sheaths and STRING

Plastic sheaths and STRINGs hold the connectors in place. They also protect the ends of the lanyards from abrasion.

Adjustable lanyards for work positioning

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

GRILLON

GRILLON HOOK

GRILLON MGO

Lanyards with energy absorber

Lanyards with energy absorber used when there is a fall risk. The energy absorber, sized according to lanyard length, allows energy to be dissipated through the tearing of specific webbing or stitching. Petzl suggests two types of lanyard with absorber:
- single-leg I lanyards for fixed work stations (ABSORBICA-I), or two-leg Y models for progression (ABSORBICA-Y)
- component lanyards having a maximum length of two meters (asymmetrical lanyards, mixed lanyards with two different connectors, etc., with ABSORBICA and JANE)

ABSORBICA-I   ABSORBICA-I MGO   ABSORBICA-Y   ABSORBICA-Y MGO

JANE   JANE MGO   ABSORBICA

DELTA

Specialized lanyards

Progression lanyards for difficult access

PROGRESS   VERTIGO TWIST-LOCK

NEW 2014

Positioning lanyards for tree care

ZILLON

NEW 2014

Lanyards with energy absorber used with the ASAP mobile fall arrester

ASAP'SORBER

NEW 2014

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

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ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

VERTICALITY

Usage: single

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 position by operating the handle, while holding the free end of the lanyard.

Usage: double

The GRILLON lanyard can be used in double mode (on the harness lateral attachment points) when the user must work with a supporting surface for the feet. This type of attachment gives better load distribution on the belt. The user precisely adjusts his position by pressing on the lanyard's pivoting cam.

GRILLON

Adjustable lanyard for work positioning

• Lanyard with fine adjustment system for precise work positioning
• Can be used in two ways:
- double mode, on the lateral attachment points of the harness, to distribute the weight on the belt (user has weight on his feet): length is adjusted by pressing on the pivoting cam)
- single mode, on the harness ventral attachment point, to distribute weight between the waistbelt and the leg loops (user is suspended): length is adjusted by operating the handle while holding the free end of the lanyard
• Removable protective sheath protects the rope from abrasive surfaces and allows smooth rope glide.
The protection can be removed when the single lanyard technique is used, to bring the user closer to the anchor
• Available in several lengths:
- GRILLON (**L52A 002**): 2 m, 435 g
- GRILLON (**L52A 003**): 3 m, 515 g
- GRILLON (**L52A 004**): 4 m, 595 g
- GRILLON (**L52A 005**): 5 m, 675 g
• Certification(s): CE EN 358

NOTE: GRILLON lanyards can also be used to create adjustable anchors or horizontal lifelines; please see specific versions of GRILLON lanyards for these uses in the Anchors and Ropes section.

All GRILLON lanyards have a handle which allows the lanyard to be used in single mode when connected to the harness ventral attachment point. The handle allows the cam to be unlocked to adjust position while holding the free end of the rope.

GRILLON lanyard length is identified by a color-coded label at the connector end.

GRILLON HOOK

Adjustable work positioning lanyard with HOOK connector

• Lanyard with fine adjustment system for precise work positioning
• Used in double mode, on the harness lateral attachment points, to distribute the weight on the belt (user has weight on his feet): length is adjusted by pressing on the pivoting cam)
• May be used in single mode, on the harness ventral attachment point, to distribute weight between the waistbelt and the leg loops (user is suspended): length is adjusted by operating the handle while holding the free end of the lanyard
• Removable protective sheath protects the rope from abrasive contact and favors smooth rope glide. The protection can be removed when the single lanyard technique is used, to bring the user closer to the anchor
• Available in several lengths:
- GRILLON (**L52H 002**): 2 m, 625 g
- GRILLON (**L52H 003**): 3 m, 735 g
- GRILLON (**L52H 004**): 4 m, 815 g
- GRILLON (**L52H 005**): 5 m, 895 g
• Certification(s): CE EN 358

GRILLON MGO

Adjustable work positioning lanyard with MGO large opening connector

• Lanyard with fine adjustment system for precise work positioning
• Used in single mode, on the harness ventral attachment point, to distribute weight between the waistbelt and the leg loops (user is suspended): length is adjusted by operating the handle while holding the free end of the lanyard
• Available in one length:
- GRILLON (**L52M 003**): 3 m, 995 g
• Certification(s): CE EN 358

GRILLON lanyard ropes are also available individually:
- rope for GRILLON lanyards (**L52R 002, 003, 004, 005**)
- rope for GRILLON HOOK lanyards (**L52RH 002, 003, 004, 005**)
- rope for GRILLON MGO lanyard (**L52RM 003**)
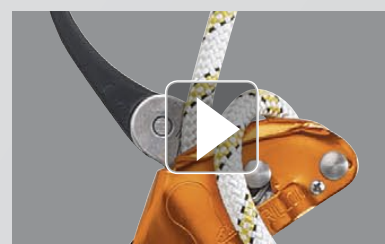
Find all the possibilities of GRILLON positioning lanyards at www.petzl.com/GRILLON.

ABSORBICA-I 80

ABSORBICA-I 150

ABSORBICA-I MGO 80

ABSORBICA-I MGO 150

ABSORBICA-Y 80

ABSORBICA-Y 150

ABSORBICA-Y MGO 80

ABSORBICA-Y MGO 150
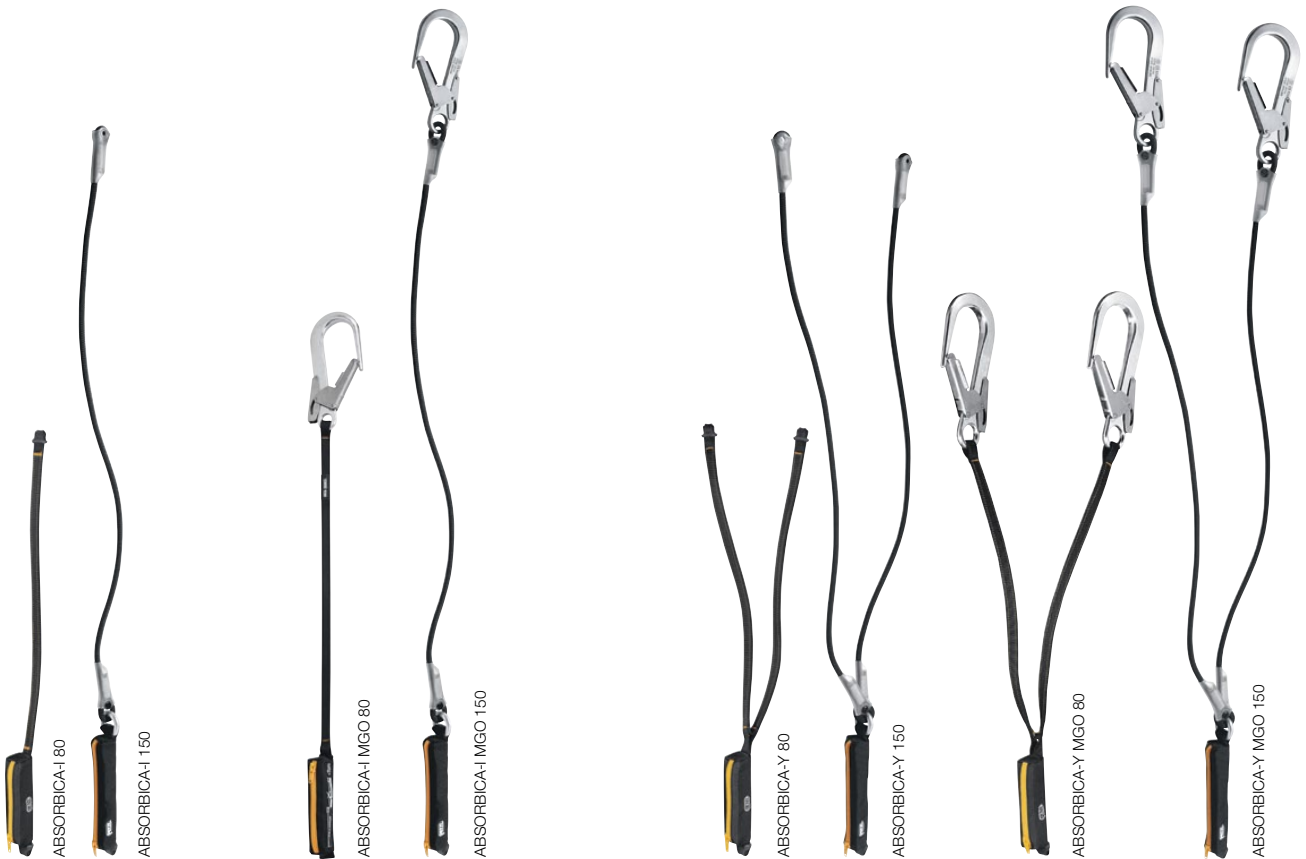
ABSORBICA-I

Energy absorber with integrated single lanyard

• Designed for protection on a horizontal lifeline (rope or cable)
• The energy of the fall is absorbed by the tearing of specific webbing
• Mesh pouch with zipper protects the energy absorber from abrasion or splashes and allows regular verification of the absorber's condition
• Energy absorber end equipped with STRING
• Available without connector or with MGO large-opening connector, so in two lengths:
- ABSORBICA-I 80 (**L58**): 0.8 m not including connector (1.5 m after tearing), 160 g, maximum clearance (factor 2 fall): 4.35 m
- ABSORBICA-I 80 MGO (**L58 MGO**): 1.05 m (1.75 m after tearing), 655 g, maximum clearance (factor 2 fall): 4.35 m
- ABSORBICA-I 150 (**L70150 I**): 1.5 m not including connector (3.35 m after tearing), 365 g, maximum clearance (factor 2 fall): 6.1 m
- ABSORBICA-I 150 MGO (**L70150 IM**): 1.75 m (3.6 m after tearing), 825 g, maximum clearance (factor 2 fall): 6.1 m
• Certification(s):
- ABSORBICA-I 80 and 150: CE EN 355
- ABSORBICA-I 80 MGO and 150 MGO: CE EN 355, CE EN 362

ABSORBICA-Y

Energy absorber with integrated double lanyard

• Designed for passing intermediate anchor points on fixed protection
• The energy of the fall is absorbed by the tearing of specific webbing
• Mesh pouch with zipper protects the energy absorber from abrasion or splashes and allows regular verification of the absorber's condition
• Energy absorber end equipped with STRING
• Available without connector or with MGO large-opening connector, so in two lengths:
- ABSORBICA-Y 80 (**L59**): 0.8 m not including connector (1.5 m after tearing), 210 g, maximum clearance (factor 2 fall): 4.35 m
- ABSORBICA-Y 80 MGO (**L59 MGO**): 1.05 m (1.75 m after tearing), 1120 g, maximum clearance (factor 2 fall): 4.35 m
- ABSORBICA-Y 150 (**L70150 Y**): 1.5 m not including connector (3.35 m after tearing), 500 g, maximum clearance (factor 2 fall): 6.1 m
- ABSORBICA-Y 150 MGO (**L70150 YM**): 1.75 m (3.6 m after tearing), 1420 g, maximum clearance (factor 2 fall): 6.1 m
• Certification(s):
- ABSORBICA-Y 80 and 150: CE EN 355
- ABSORBICA-Y 80 MGO and 150 MGO: CE EN 355, CE EN 362

Component lanyards with energy absorber

JANE

+

DELTA n° 8

+

ABSORBICA

DELTA n° 8

ABSORBICA

JANE

JANE MGO

DELTA n° 8 P11 8

Triangular steel quick link

• To connect JANE lanyards to an ABSORBICA energy absorber

See CONNECTORS pages

ABSORBICA L57

Tear webbing energy absorber

• Used in combination with a JANE lanyard to set up an energy-absorbing lanyard with a maximum length of two meters
• Ends equipped with STRING to hold the connector in position and protect the webbing from abrasion
• Compact and lightweight
• Length: 0.2 m
• Length after complete tearing: 1.6 m
• Maximum clearance (fall factor 2): 3.9 m + length of energy absorber, lanyard and connectors
• Weight: 154 g
• Certification(s): CE EN 355

JANE

Non-adjustable dynamic rope lanyard

• Can be combined with an ABSORBICA energy absorber to set up an energy-absorbing I or Y lanyard with a maximum length of two meters
• Sewn ends protected by plastic sheath to hold the connector in place and protect the terminations from abrasion
• Available without connector or with large-opening MGO connector for attachment to metal structures, cables and large diameter bars (large-opening, auto-locking connector permanently sewn into the lanyard termination)
• Available without connector:
- JANE 0.6 m (**L50 60**): 110 g
- JANE 1 m (**L50 100**): 130 g
- JANE 1.5 m (**L50 150**): 185 g
- JANE 2 m (**L50 200**): 225 g
• Available with MGO connector:
- JANE MGO 0.6 m (**L53 60**): 565 g
- JANE MGO 1 m (**L53 100**): 585 g
- JANE MGO 1.5 m (**L53 150**): 640 g
• Certification(s): CE EN 354

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

Progression lanyard for difficult access

PROGRESS L44
Progression lanyard

Fall indicator: the green stitching disappears when the lanyard is subjected to a major fall (improper use)
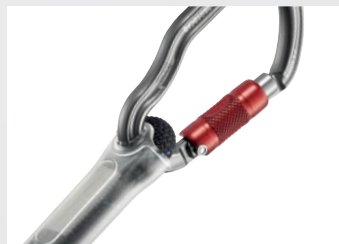
The plastic sheath holds the connector in place. It protects the ends of the lanyard from repetitive abrasion

• Dynamic rope lanyard limits energy transmitted to the user during a limited fall (do not go above the anchor point)
• Fall indicator: the green stitching disappears when the lanyard is subjected to a major fall (improper use): the lanyard requires early retirement
• Y shape allows connection when progressing along a fixed line
• Long arm used with an ASCENSION handled rope clamp for progression on a rope
• Short arm for clipping in when passing intermediate anchors
• Ends equipped with a plastic sheath that holds the connector in place and protects the webbing from abrasion
• Lengths:
- short arm: 30 cm
- long arm: 65 cm
• Weight: 150 g
• Certification(s): CE EN 354

NEW 2014

VERTIGO TWIST-LOCK M40A
RLA

Carabiner for progression lanyard

• Designed for use at the end of a PROGRESS lanyard
• Facilitates manipulations when passing intermediate anchors
- ergonomic shape for excellent grip
- TWIST-LOCK automatic locking system is easy to use. It is unlocked by a simple rotation
- wide opening for easy connection of the carabiner
- Keylock system to avoid any involuntary snagging of the carabiner
• Simplified inspection:
- H profile protects markings from abrasion
- identification with Datamatrix code for quick inspection of product
• Weight: 100 g
• Breaking strength:
- major axis: 25 kN
- minor axis: 10 kN
- open gate: 8 kN
• Gate opening: 25 mm
• Certification(s): CE EN 362

Positioning lanyard for tree care

ZILLON®
Adjustable work positioning lanyard for tree care
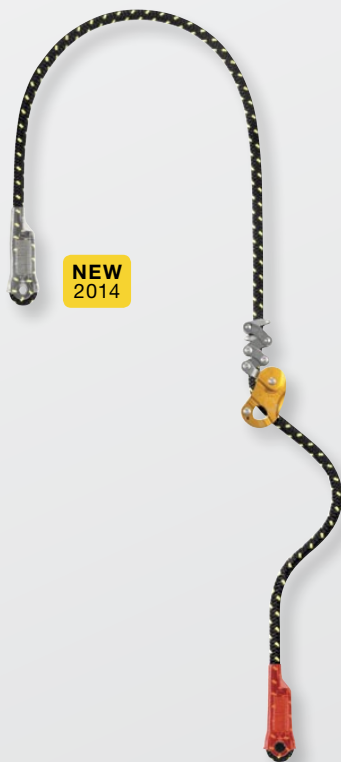
NEW 2014
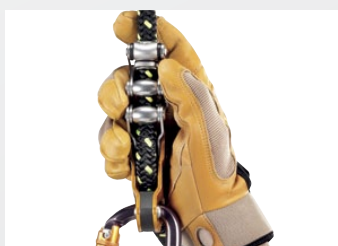
Easily adjusted with one hand thanks to the progressive locking/unlocking action of the device

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

• It is used doubled, on the harness side attachment points, to distribute the load on the waistbelt
• Easily adjusted with one hand thanks to the progressive locking/unlocking action of the device
• Pulley mounted on sealed ball bearings to allow slack to be taken up easily
• Steel friction elements for increased longevity
• Available in three lengths:
- ZILLON 25 (**L22 025**): 2.5 m (605 g)
- ZILLON 40 (**L22 040**): 4 m (790 g)
- ZILLON 55 (**L22 055**): 5.5 m (975 g)
• Replacement ropes available in different sizes:
- 2.5 m (**L22R 025**)
- 4 m (**L22R 040**)
- 5.5 m (**L22R 055**)
• Certification(s): CE EN 358

Lanyard with energy absorber for ASAP and ASAP LOCK mobile fall arresters

NEW 2014

ASAP'SORBER

STRING

ASAP'SORBER L71
Lanyard with energy absorber for ASAP or ASAP LOCK

Find a complete description of the ASAP'SORBER lanyard on page 81.

STRING
Webbing protection

• Holds the connector in place and protects the webbing from abrasion
• Available in two sizes:
- STRING L (**M90000 L**): for webbing from 15 to 20 mm in width (ABSORBICA-I and ABSORBICA-Y)
- STRING XL (**M90000 XL**): for webbing from 25 to 30 mm in width (ASAP'SORBER, ABSORBICA)

HARNESSES

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LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

NEW 2014

ASAP LOCK

Mobile fall arrester for rope, with locking function for difficult access.

NEW 2014

ASAP

Mobile fall arrester for rope, for fall protection.

NEW 2014

ASAP'SORBER

Lanyard with integrated energy absorber.

Constant fall protection
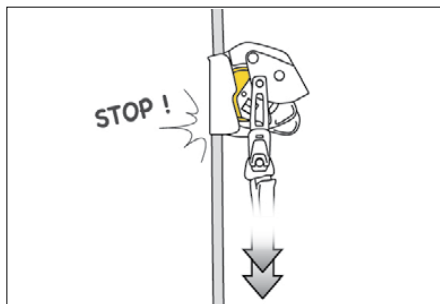
In case of a sudden movement due to a fall, slide or uncontrolled descent, the ASAP LOCK and ASAP fall arresters lock on the rope and stop the worker's fall.
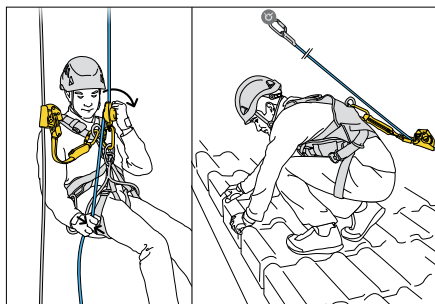
These mobile fall arresters work equally well on vertical or angled ropes, to adapt to any work site configuration.

In a fall, the user may reflexively grab the device with his hands; the ASAP LOCK and ASAP mobile fall arresters will work, even in this situation.

Simple to use and effective
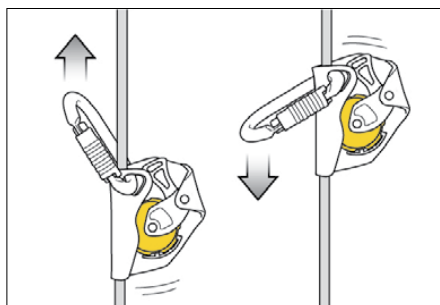
The ASAP LOCK and ASAP follow the worker at height in all his movements, with no need for any manual operation. He can therefore focus completely on his task.

These mobile fall arresters may be quickly and easily installed anywhere on the rope by simply retracting the locking wheel.
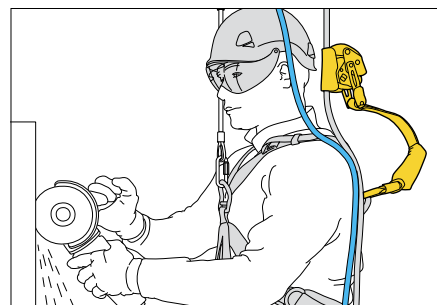
The ASAP'SORBER energy-absorbing lanyard allows the user to distance the rope, freeing the work space and protecting the rope (from sharp tools, molten metal splash, etc.).

VERTICALITY

ASAP® LOCK B71ALU

Mobile fall arrester with locking function

NEW 2014

Button for activating locking function

Catch for locking the wheel

Locking wheel

Connection arm

Connection point for ASAP'SORBER

The locking function of the ASAP LOCK immobilizes the fall arrester on the rope, reducing the length of the fall
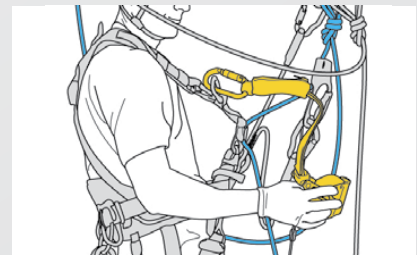
The connection arm of the ASAP LOCK makes the system drop-proof when passing intermediate anchors

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

Find all the possibilities of the ASAP LOCK mobile fall arrester at www.petzl.com/ASAP.

• Constant fall protection:
- arrests falls, slides, and uncontrolled descents
- works on vertical or angled rope
- locks on the rope even if grabbed during the fall
• Integrated locking function allows the user to immobilize the device to reduce the length of a fall. In case of a strong wind, this function also prevents the rope from being blown upward.
• Simple to use, and effective;
- moves up or down the rope without any manual manipulation of the device
- easy to install and remove at any point on the rope
- connection arm makes the system difficult to lose when passing intermediate anchors
- may also be used with an ASAP'SORBER energy absorbing lanyard to work at a distance from the rope
• Weight: 425 g
• Certification(s): CE EN 353-2,
CE EN 12 841 type A

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PACKS AND ACCESSORIES

NEW 2014

Find all the possibilities of the ASAP mobile fall arrester at www.petzl.com/ASAP.

NEW 2014

ASAP® B71AAA

Mobile fall-arrest device for rope

• Constant fall protection:
- arrests falls, slides, and uncontrolled descents
- works on vertical or angled rope
- locks on the rope even if grabbed during the fall
• Simple to use, and effective;
- moves up or down the rope without any manual manipulation of the device
- easy to install and remove at any point on the rope
- may be combined with an ASAP'SORBER energy absorbing lanyard to work at a distance from the rope
• Comes with the OK TRIACT-LOCK automatic locking carabiner
• Weight: 370 g (295 g for ASAP and 75 g for OK TRIACT-LOCK)
• Certification(s): CE EN 353-2,
CE EN 12 841 type A

ASAP'SORBER

Lanyard with energy absorber for ASAP or ASAP LOCK

• Attaches the ASAP or ASAP LOCK mobile fall arrester to the harness
• Allows the user to distance himself from the rope in order to:
- clear the work area
- protect the rope from sharp tools and molten metal splash
• Absorbs the energy in case of a fall by tearing specific seams
• Zippered fabric pouch protects the energy absorber from abrasion and other damage while allowing for regular inspection of the absorber
• Ends equipped with STRING to hold the connector in position and protect the webbing from abrasion
• Available in two lengths for choice of the best balance between distance from the rope and reducing the fall length:
- ASAP'SORBER (**L71AA 20**): 20 cm, 75 g
- ASAP'SORBER (**L71AA 40**): 40 cm, 105 g
• Clearance: see explanations in the Instructions for Use and the Product Experience supplement available at www.petzl.com/ASAP
• Certification(s): CE EN 355

VERTICALITY

To meet the many different needs encountered in the field, there exists a wide selection of connectors. Each product is designed for a specific use based on its materials, shape, size, gate-opening capacity and locking system.

Hydrokarst, Voreppe, Isére France © Lafouche
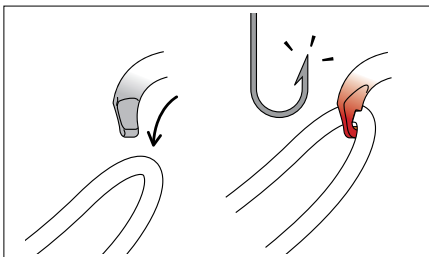
Keylock system

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, etc..

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.

Shapes

Oval shape
Versatile symmetrical shape specially adapted for devices with widely-spaced side plates (FIXE pulley, ASCENSION rope clamps, etc.).
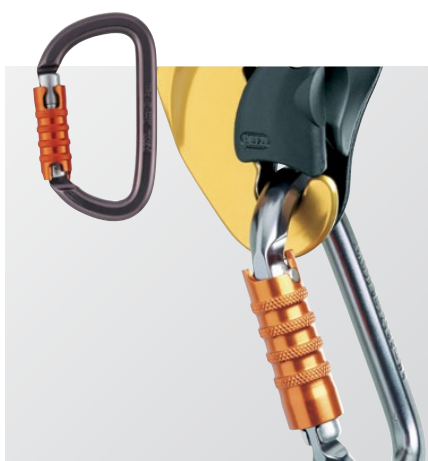
D-shape
Asymmetrical shape allows easy connection and good positioning of the device along the major axis.
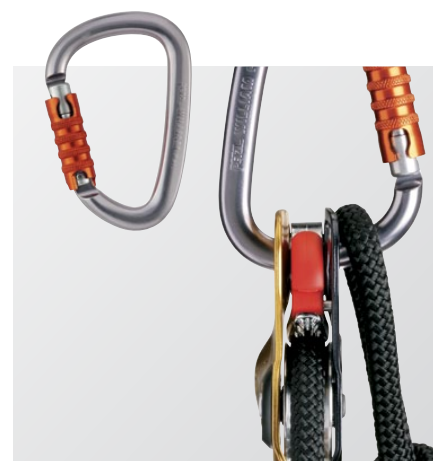
Pear shape
Asymmetrical shape has a wide opening and great capacity.

Locking systems

For occasional manipulation: manual locking
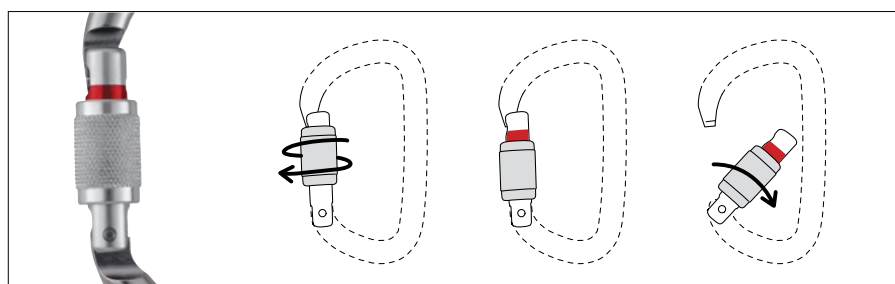
SCREW-LOCK
Manual screw gate locking system
• The red band provides a visual warning when the carabiner is unlocked
• Recommended for harsh environments (mud, ice), where dust and dirt could cause an automatic locking mechanism to malfunction
• Recommended when a carabiner needs to be opened and closed occasionally

For frequent manipulation: automatic locking
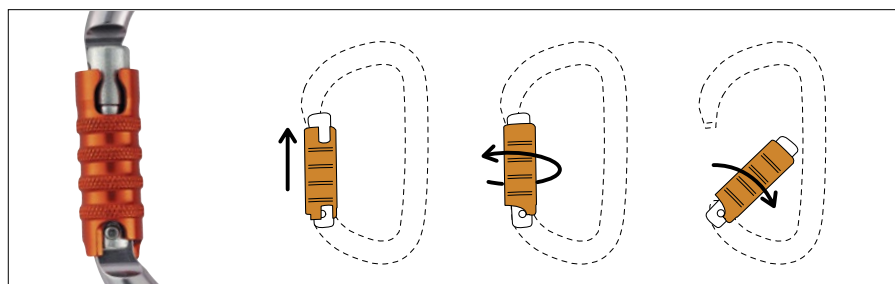
TRIACT-LOCK
Auto-locking system
• Unlocks quickly in two steps, by raising and then turning the sleeve
• Recommended when a carabiner needs to be frequently opened and closed
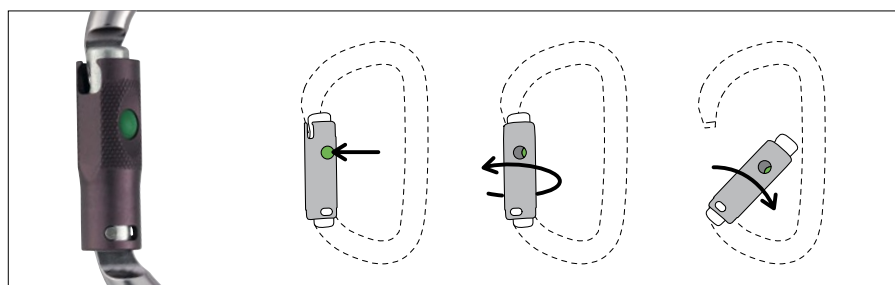
BALL-LOCK
Auto-locking system with lock indicator
• Green dot indicates when sleeve is locked
• Quick to unlock in two steps, by pressing on the green dot and turning the sleeve
• Can be opened and closed with one hand
• Recommended when a carabiner needs to be frequently opened and closed

PETZL

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Aluminum carabiners

Lightweight carabiners with an optimal weight-to-strength ratio, designed for the worker at height.

WILLIAM

Am'D

OK

Steel carabiners

Carabiners suitable for difficult environments, primarily used for setting up anchors and for connecting to metal structures.
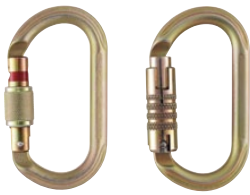
OXAN
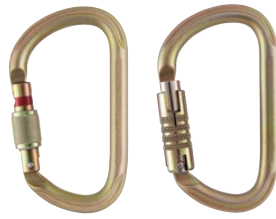
VULCAN

Large connectors

Connectors with a wide gate opening designed for connecting to thick structures.

MGO 110

MGO 60

Special aluminum carabiners

Lightweight carabiners designed for specific uses: harness fastening, use at the end of a lanyard, additional braking on a descender, etc..

OMNI

NEW
2014

VERTIGO TWIST-LOCK

FREINO

SPIRIT

Quick links

Screw links for semi-permanent connection of equipment.

DELTA

GO

DEMI ROND

Aluminum carabiners

WILLIAM SCREW-LOCK

Am'D SCREW-LOCK

OK SCREW-LOCK

WILLIAM TRIACT-LOCK

Am'D TRIACT-LOCK

OK TRIACT-LOCK

WILLIAM BALL-LOCK

Am'D BALL-LOCK

WILLIAM

Large capacity aluminum carabiner

• Large size and opening to allow easy anchoring of several ropes and slings
• Wide pear shape facilitates belaying with a Munter hitch
• Keylock system helps prevent snagging of the carabiner during maneuvers
• Red indicator provides a visual warning when the carabiner is unlocked (on SCREW-LOCK version)
• Available in three different locking systems:
- WILLIAM (**M36 SL**): SCREW-LOCK
- WILLIAM (**M36 TL**): TRIACT-LOCK
- WILLIAM (**M36 BL**): BALL-LOCK
• Also available in black:
- WILLIAM (**M36 SLN**): SCREW-LOCK black
- WILLIAM (**M36 TLN**): TRIACT-LOCK black

Am'D

Asymmetrical aluminum carabiner

• Specially adapted for attaching equipment
• Excellent strength-to-weight ratio
• Keylock system helps prevent snagging of the carabiner during maneuvers
• Red indicator provides a visual warning when the carabiner is unlocked (on SCREW-LOCK version)
• Available in three different locking systems:
- Am'D (**M34 SL**): SCREW-LOCK
- Am'D (**M34 TL**): TRIACT-LOCK
- Am'D (**M34 BL**): BALL-LOCK
• Also available in black:
- Am'D (**M34 TLN**): TRIACT-LOCK black

OK

Oval aluminum carabiner

• Versatile oval symmetric shape for optimal positioning of equipment (pulleys, ascenders, mobile fall arresters, etc.)
• Ideal for hauling
• Keylock system helps prevent snagging of the carabiner during maneuvers
• Red indicator provides a visual warning when the carabiner is unlocked (on SCREW-LOCK version)
• Two locking systems available:
- OK (**M33 SL**): SCREW-LOCK
- OK (**M33 TL**): TRIACT-LOCK
• Also available in black:
- OK (**M33 SLN**): SCREW-LOCK black
- OK (**M33 TLN**): TRIACT-LOCK black

VERTICALITY

OXAN SCREW-LOCK

VULCAN SCREW-LOCK

MGO 110

OXAN TRIACT-LOCK

VULCAN TRIACT-LOCK

MGO 60

OXAN

Oval steel carabiner

• Steel adapted to difficult use conditions
• Keylock system helps prevent snagging of the carabiner during maneuvers
• Red indicator provides a visual warning when the carabiner is unlocked (on SCREW-LOCK version)
• Two locking systems available:
- OXAN (**M72 SL**): SCREW-LOCK
- OXAN (**M72 TL**): TRIACT-LOCK
• Also available in black and in specific versions that meet European and North American work standards (see summary table):
- OXAN (**M72 SLN**): SCREW-LOCK black
- OXAN (**M72 TLA**): TRIACT-LOCK (European and North American work standards)
- OXAN (**M72 TLN**): TRIACT-LOCK black (European and North American work standards)

VULCAN

High-strength steel carabiner

• Steel adapted to difficult use conditions
• For use with heavy loads
• Large size allows easier connection of multiple elements
• Wide opening for connection to thick anchors
• Keylock system helps prevent snagging of the carabiner during maneuvers
• Red indicator provides a visual warning when the carabiner is unlocked (on SCREW-LOCK version)
• Two locking systems available:
- VULCAN (**M73 SL**): SCREW-LOCK
- VULCAN (**M73 TL**): TRIACT-LOCK
• Also available in black and in specific versions that meet European and North American work standards (see summary table):
- VULCAN (**M73 SLN**): SCREW-LOCK black
- VULCAN (**M73 TLA**): TRIACT-LOCK (European and North American work standards)
- VULCAN (**M73 TLN**): TRIACT-LOCK black (European and North American work standards)

MGO

Very large automatic locking directional connector

• Designed for connection to metallic structures or to large-diameter cables and bars
• Ergonomic unlocking handle
• Available in two versions:
- MGO (**MGO 110**): 110 mm gate opening
- MGO (**MGO 60**): 60 mm gate opening

NEW 2014

OMNI SCREW-LOCK

VERTIGO TWIST-LOCK

DELTA (P11-8)

DELTA (P11-8B)
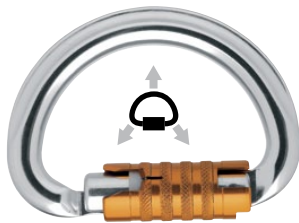
DELTA (P11)

OMNI TRIACT-LOCK

FREINO

SPIRIT

GO

DEMI ROND

OMNI

Multi-directional semi-circle carabiner

• Multi-directional carabiner for:
- fastening the NEWTON and FALCON ASCENT harnesses by joining the two attachment points
- connecting a fall arrest system (NEWTON) or a CROLL ventral rope clamp (FALCON ASCENT)
• Strength: 15 kN (in all directions)
• Keylock system helps prevent snagging of the carabiner during maneuvers
• Red indicator provides a visual warning when the carabiner is unlocked (on SCREW-LOCK version)
• Two locking systems available:
- OMNI (**M37 SL**): SCREW-LOCK
- OMNI (**M37 TL**): TRIACT-LOCK
• Also available in black:
- OMNI (**M37 SLN**): SCREW-LOCK black
- OMNI (**M37 TLN**): TRIACT-LOCK black

VERTIGO TWIST-LOCK M40A RLA

Carabiner for progression lanyard

Complete description of the VERTIGO TWIST-LOCK carabiner on page 76.

FREINO M42

Carabiner with friction spur for descenders

• The spur helps increase the friction for improved control of the descent of a heavy load (e.g. two-person rescues)
• Rope is easily inserted into the spur, without opening the carabiner
• TWIST-LOCK automatic locking sleeve, unlocked by a simple rotation
• Keylock system helps prevent snagging of the carabiner during maneuvers
• Used, for example, with the I'D and RIG self-braking descenders

SPIRIT M53 S

Non-locking progression carabiner

• Should be used only for progression using climbing techniques
• Non-locking, clips easily
• Keylock system helps prevent snagging of the carabiner during maneuvers

DELTA

Triangular steel quick link

• When closed with a wrench, it becomes a semi-permanent anchor ring
• Available in three versions:
- DELTA (**P11**): 10 mm diameter rod stock
- DELTA (**P11 8**): 8 mm diameter rod stock
- DELTA (**P11 8B**): 8 mm diameter rod stock (with bar for positioning the CROLL on a harness)
• Also available in black version: DELTA (**P11 8BN**)

GO P15

Oval steel quick link

• When closed with a wrench, it becomes a semi-permanent anchor ring

DEMI ROND P18

Semi-circle aluminum alloy quick link

• Used to close any harness having two attachment points that must be joined with a connector
• When closed with a wrench, it becomes a semi-permanent anchor ring

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VERTICALITY

	Locking system	Reference		Certification(s)	Weight
Aluminum carabiners								
WILLIAM	SCREW-LOCK	M36 SL / SLN	25 mm	25 kN	7 kN	7 kN	CE EN 362	90 g
	TRIACT-LOCK	M36 TL / TLN	24 mm					
	BALL-LOCK	M36 BL	24 mm					
Am'D	SCREW-LOCK	M34 SL	21 mm	28 kN	7 kN	8 kN	CE EN 362	75 g
	TRIACT-LOCK	M34 TL	21 mm					
	BALL-LOCK	M34 BL	22 mm					
OK	SCREW-LOCK	M33 SL / SLN	19 mm	24 kN	10 kN	7 kN	CE EN 362	75 g
	TRIACT-LOCK	M33 TL / TLN	19 mm		8 kN			
Steel carabiners								
OXAN	SCREW-LOCK	M72 SL / SLN	20 mm	27 kN	16 kN	7 kN	CE EN 362 NFPA 1983 Technical Use	195 g
	TRIACT-LOCK (European standards)	M72 TL	19 mm					215 g
	TRIACT-LOCK (North American and European standards)	M72 TLA / TLN	18 mm				CE EN 362 ANSI Z359.1 NFPA 1983, Technical Use CSA Z259.12	235 g
VULCAN	SCREW-LOCK	M73 SL / SLN	29 mm	40 kN	16 kN	11 kN	CE EN 362 NFPA 1983, General Use	265 g
	TRIACT-LOCK (European standards)	M73 TL	28 mm					285 g
	TRIACT-LOCK (North American and European standards)	M73 TLA / TLN	27 mm				CE EN 362 ANSI Z359.1 NFPA 1983, General Use CSA Z259.12	305 g
Large connectors								
MGO	Automatic	MGO60	60 mm	25 kN	-	-	CE EN 362	455 g
		MGO110	110 mm	23 kN	15 kN	7 kN	CE EN 362	940 g
Special aluminum carabiners								
OMNI	SCREW-LOCK	M37 SL / SLN	22 mm	20 kN	15 kN	7 kN	CE EN 362	85 g
	TRIACT-LOCK	M37 TL / TLN	22 mm					90 g
FREINO	TWIST-LOCK	M42	15 mm	25 kN	10 kN	9 kN	CE EN 362	85 g
SPIRIT	-	M53 S	21 mm	23 kN	8 kN	9 kN	CE EN 12275 type B	39 g
Quick links								
DELTA	Quick link	P11	12 mm	25 kN	10 kN	-	CE EN 362 type Q	150 g
		P11-8 / P11-8B	10 mm	25 kN	10 kN	-	CE EN 362 type Q	85 / 95 g
GO	Quick link	P15	16 mm	25 kN	10 kN	-	CE EN 362 type Q	60 g
DEMI ROND	Quick link	P18	10 mm	25 kN	10 kN	-	CE EN 362 type Q	55 g

Complementary information

Carabiners are the key element in the belay chain that is part of all vertical activities. This is why it is essential to understand their different uses and limitations. A carabiner is very strong when it is loaded along its major axis.

OK!

A carabiner may become weaker under certain conditions:
- if it is not loaded along its major axis (figures 1 and 2)
- if the gate is open (figure 3)
- if it is subjected to external pressure (figure 4)

NO!

NO!

NO!

NO!

1

2

3

4

Solutions:

Put a STRING on the lanyard

Use a three-directional carabiner

or

OK!

Lengthen or shorten the sling

Lengthen or shorten the sling

Always keep an eye on your carabiners

Which connector should be used with the NEWTON?

The connector to use with the NEWTON harness depends on the attachment point used for connecting the fall arrest system.

NEWTON

Use of sternal attachment point
The connector acts as a connection point and is loaded along three axes.
Use the OMNI type EN 362 locking three-directional connector.

OK!

NO!

Use of dorsal attachment point
The connector acts only to fasten the harness and is loaded along the major axis.
You can use an OK type EN 362 locking connector.
Warning: Only the dorsal attachment points may be used to connect the fall arrest system.

OK!

VERTICALITY

Profil, VILLA MEDITERRANEE, Région Provence Alpes Côte d'Azur, Marseille, France - Architecte : BOERI Studio, Milano © Lafouche

For both work-at-height and rescue, access from above is preferable because it allows one to take advantage of the force of gravity to save energy. Descenders are designed to help regulate friction and control the descent on a fixed rope. They allow a worker to position himself at any point on the rope. Some descenders can also be used to belay a leader using lead climbing techniques.

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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 work sites 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

RIG

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.

Personal escape systems

Rescue devices that allow a single person to get himself out of a building or structure in case of an emergency. This specialized equipment is available in two versions:
- EXO: has an anchor hook adapted for locations where the possibility of finding an anchor point is uncertain
This product must only be used after the user has received specific Petzl training.
- EXO EASHOOK: has an anchor carabiner for use when an evacuation plan with anchor point possibilities is clearly identified

NEW 2014

ZIGZAG

EXO

EXO EASHOOK

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.

RACK

HUIT

VERTICALITY

I'D S

Self-braking descender with anti-panic function

Moving side plate

Safety gate

Attachment hole

Multi-functional handle

Button for horizontal or inclined progression

Belaying

Descent

Anti-panic function

Lock-off

Transport

The I'D S descender's multi-function handle allows the user to control the descent and to get into position at the work station. It also has an anti-panic function that is engaged if the user pulls too hard on the handle.

The button on the multi-function handle facilitates smooth movement along low-angle or horizontal terrain.

The anti-error catch reduces the risk of an accident due to incorrect installation of the rope in the device. The locking screw of the swinging side-plate allows the I'D S to be part of a rescue kit.

• Multi-functional handle allows the user to:
- unblock the rope and control the descent with the hand on the free end of the rope
- move more easily on horizontal or low-angle terrain, thanks to the button on the handle
- get into position without having to tie off the device
• Anti-panic function is engaged if the user pulls too strongly on the handle: brakes and stops the descent automatically
• Anti-error safety catch to reduce the risk of an accident due to incorrect installation of the device on the rope The shape of the cam is designed to improve rope glide when ascending
• The safety gate on the moving side plate helps prevent dropping the device and facilitates installation of the rope when passing intermediate anchors
• Pivoting cam facilitates taking up the slack in the rope. Can also be used to make a reversible haul system, and for short ascents (in conjunction with a FOOTAPE or FOOTCORD foot loop and an ASCENSION handled rope clamp)
• The locking screw of the swinging side-plate allows the I'D S to be part of a rescue kit

• Lowers heavy loads up to 250 kg (only for expert users; consult the Instructions for Use for the device at www.petzl.com)
• For ropes between 10 and 11.5 mm in diameter
• Available in two colors:
- I'D S (**D200S0**): yellow
- I'D S (**D200SN**): black
• Certification(s):
- CE EN 341 class A
- CE EN 12841 type C
- NFPA 1983 Technical Use
• Weight: 530 g

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

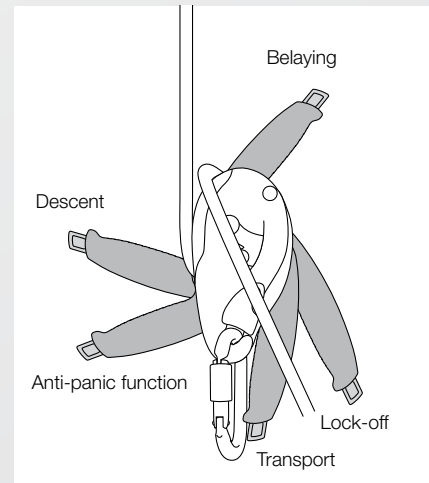PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

Automatic return system on the handle

Belaying

Descent

Lock-off

Transport

The RIG descender's multi-functional handle allows the user to control the descent and to position himself at the work station. The automatic return system on the handle limits risks in case of an involuntary action by the user.

I'D L

Self-braking descender with anti-panic function
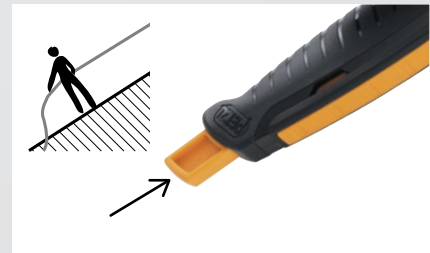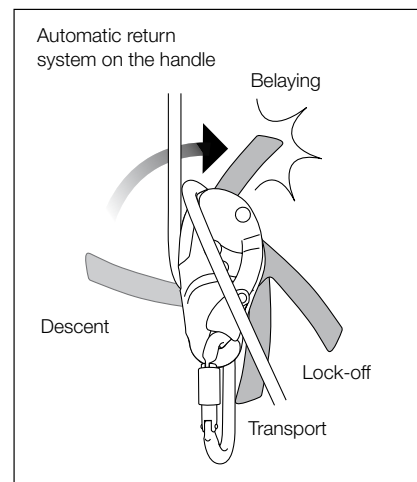
• Designed for rescue: lacks gated attachment hole
• Multi-functional handle allows the user to:
- unblock the rope and control the descent with the hand on the free end of the rope
- move more easily on horizontal or low-angle terrain, thanks to the button on the handle
- get into position without having to tie off the device
• Anti-panic function is engaged if the user pulls too strongly on the handle: brakes and stops the descent automatically
• Anti-error safety catch to reduce the risk of an accident due to incorrect installation of the device on the rope
• Pivoting cam facilitates taking up the slack in the rope. Can also be used to make a reversible haul system, and for short ascents (in conjunction with a FOOTAPE or FOOTCORD foot loop and an ASCENSION handled rope clamp)
• Lowers heavy loads up to 272 kg (only for expert users; consult the Instructions for Use for the device at www.petzl.com)
• For ropes between 11.5 and 13 mm in diameter
• Available in two colors:
- I'D L (**D200L0**): red
- I'D L (**D200LN**): black
• Certification(s):
- CE EN 341 class A
- CE EN 12841 type C
- NFPA 1983 General Use
• Weight: 530 g

RIG

Compact self-braking descender

• Designed for rope access work (expert users only)
• Multi-functional handle allows the user to:
- unblock the rope and control the descent with the hand on the free end of the rope
- get into position without having to tie off the device
• The automatic return system on the handle limits risks in case of an involuntary action by the user
• Handle storage position reduces the risk of snagging when the descender is being carried on the harness
• The safety gate on the moving side plate helps prevent dropping the device and facilitates installation of the rope when passing intermediate anchors
• Pivoting cam facilitates taking up the slack in the rope. Can also be used to make a reversible haul system, and for short ascents (in conjunction with a FOOTAPE or FOOTCORD foot loop and an ASCENSION handled rope clamp)
• Lowers heavy loads up to 200 kg (only for expert users; consult the Instructions for Use for the device at www.petzl.com)
• For single ropes between 10.5 and 11.5 mm in diameter
• Available in two colors:
- RIG (**D21A**): yellow
- RIG (**D21AN**): black
• Certification(s):
- CE EN 12841 type C
- CE EN 341 class A
- NFPA 1983 Technical Use
• Weight: 380 g
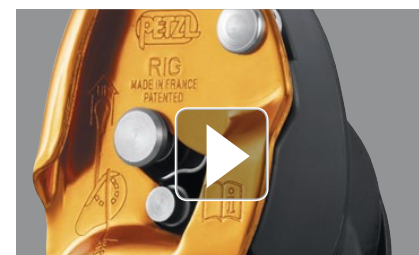
Find more about the RIG at www.petzl.com/RIG.

VERTICALITY

ZIGZAG® D22A

Mechanical Prusik for tree care

NEW 2014

The device is released by simply pressing on the release lever. When the lever is released, the device jams again. Varying the pressure on this lever controls the speed of the descent.
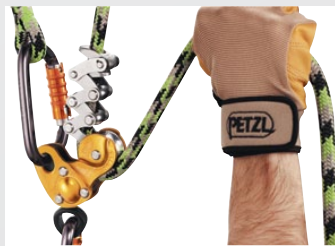
The pulley is mounted on sealed ball bearings to allow the rope to be taken up easily.

• Technique identical to classic Prusik pulley system
• Release lever mounted on spring for great precision when jamming/releasing the device. Varying the pressure on this lever controls the speed of the descent
• Friction links provide progressive braking action for smooth movement
• Pulley mounted on sealed ball bearings to allow slack to be taken up easily
• Swivel always keeps the device in position for better rope glide through the device
• Steel construction for improved durability
• Upper connection point for easily connecting the end of the double rope.
• Only for use on double ropes
• Rope diameter: 11.5-13 mm
• Rope compatibility: EN 1891 type A semi-static rope
• Certification(s): CE
• Weight: 320 g

See a video on the mechanical Prusik for tree care at www.petzl.com/ZIGZAG.

EXO D30015 B

Personal escape system with anchor hook adapted for locations where the possibility of finding an anchor point is uncertain

• Two ways to use the multi-purpose anchor hook:
- around a structure, fixed with a locking hitch
- on a window sill, as a last resort
• Self-braking system for:
- rapid horizontal movement
- going through a window
- control and stop a descent
- limit the force transmitted to the user in case of a fall
• Technora (aramid fiber) 7.5 mm diameter static rope, resists abrasion and high temperatures
• Meta-aramid fiber (fire-resistant) carry bag for attaching the system directly to the harness
• Certification(s): NFPA 1983 Technical Use
• Weight: 1700 g (3.75 lb)
• Comes with 15 m (50 ft) rope (other lengths available on special order)

BECAUSE OF THE UNIQUE SHAPE OF THE ANCHOR HOOK, SPECIFIC PETZL TRAINING FOR THE EXO IS MANDATORY.

EXO EASHOOK

Personal escape system with EASHOOK carabiner (used during an evacuation where possible anchor points have been identified)

• EASHOOK anchor carabiner is easy to manipulate
• Technora (aramid fiber) 7.5 mm diameter static rope, resists abrasion and high temperatures
• Self-braking system allows the user to:
- easily give slack
- control and stop a descent
- limit the force transmitted to the user in case of a fall
• Meta-aramid fiber (fire-resistant) carry bag for attaching the system directly to the harness
• Available in two versions:
- EXO EASHOOK (**D30015 CN**)
- EXO EASHOOK black (**D30015 CNN**): black
• Certification(s): CE, EN 341 type D
• Weight: 1300 g
• Comes with 15 m (50 ft) rope (other lengths available on special order)

RACK   HUIT

RACK D11

Variable friction descender with braking bars

• Allows the friction to be adjusted during the descent according to the weight of the rope: the lower bar is removable and easy to put in place
• Distributes friction and heat to help preserve the rope
• Does not twist the rope
• For single and double ropes between 9 and 13 mm in diameter
• Weight: 470 g

HUIT D02

Figure 8 descender

• Square shape to reduce kinking the ropes and formation of a lark's head knot
• Compact and lightweight
• For single and double ropes between 8 and 13 mm in diameter
• Weight: 100 g

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

VERTICALITY

Prisme, Petzl Batiment M3, Crolles, Isère, France © Lafouche

Rope clamps are primarily used for progression on ropes and for creating haul systems.

Easy to use

Rope clamps have to be easy and quick to use, for efficiency during progression, for passing intermediate anchors and for transitioning from ascending to descending. To do this, the rope is grabbed by a retractable spring-loaded cam. When the cam is locked in the open position, the rope channel is clear and thus facilitates the installation of the clamp onto the rope.

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

PROGRESS

FOOTAPE

FOOTCORD

LOOPING

CROLL

SECUR

ASCENTREE

PANTIN

Rope clamp for hauling

BASIC

Emergency rope clamp

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

TIBLOC

Cam-loaded rope clamps

RESCUCENDER

MICROCENDER

MICROGRAB

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

VERTICALITY

ASCENSION

Handled rope clamp: right- and left-handed versions

Connection hole for creating a pulley/ rope clamp combination or for guiding the rope

Toothed cam

Cam safety catch

Molded grip

Connection holes for foot loop and lanyard

ASCENSION
left-handed

ASCENSION
right handed
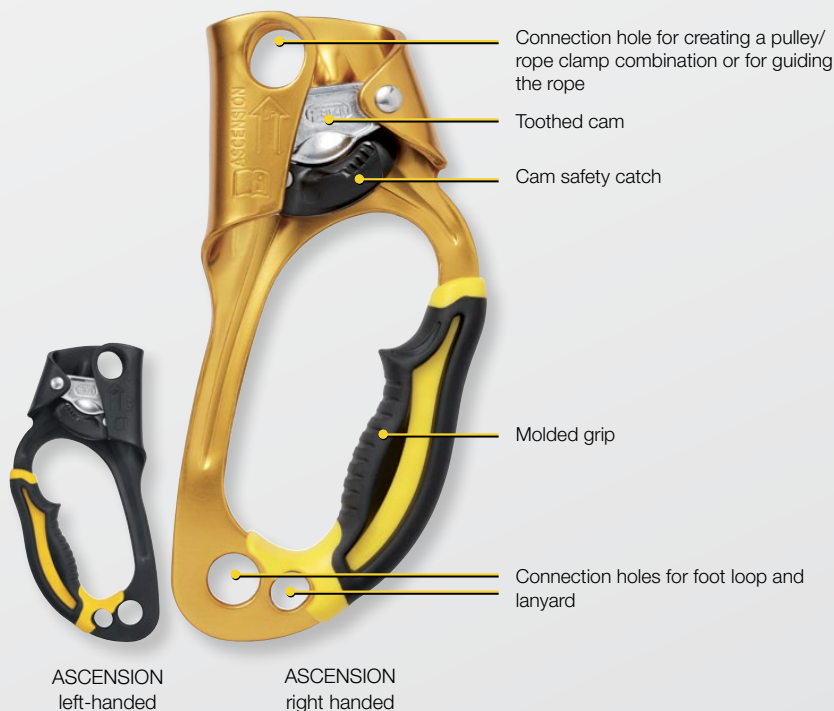
• Designed for ascending and occasionally for hauling (progress capture)
• Wide, ergonomic molded handle allows a comfortable yet powerful grip
• Toothed cam with self-cleaning slot optimizes performance under any conditions (e.g. rope that is icy, muddy, etc.)
• Lower holes for connecting a PROGRESS lanyard and installing a FOOTAPE or FOOTCORD foot loop with a quick link
• Upper connection hole for creating a pulley/rope clamp combination or for guiding the rope
• Available in left- or right-handed and in black or yellow versions:
- ASCENSION (**B17WRA**): right-handed, yellow
- ASCENSION (**B17WLA**: left-handed, black
- ASCENSION (**B17WRN**): right-handed, all black
- ASCENSION (**B17WLN**): left-handed, all black
• For single ropes between 8 and 13 mm in diameter
• Certification(s):
- CE EN 567
- CE EN 12841 type B
- NFPA 1983 Technical Use
• Weight: 195 g
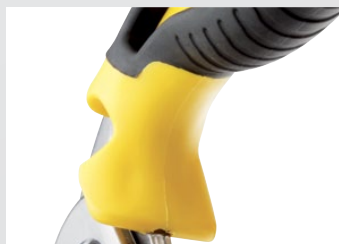
The molded dual-density grips have an area for the index finger and a wide, supportive base to keep the hand from slipping. This shape ensures a comfortable and powerful grip, increasing efficiency when ascending a rope.

The safety catch on frame-loaded rope clamps allows them to be installed or removed with one hand at any point on the rope. It can be easily manipulated, even with gloves.

PROGRESS L44

Progression lanyard

• Dynamic rope lanyard limits energy transmitted to the user during a limited fall (do not go above the anchor point)
• Fall indicator: the green stitching disappears when the lanyard is subjected to a major fall (improper use)
• Y shape allows connection when progressing along a fixed line
• Long arm used with an ASCENSION handled rope clamp for progression on a rope
• Short arm for clipping in when passing intermediate anchors
• Ends equipped with a plastic sheath that holds the connector in place and protects the webbing from abrasion
• Lengths:
- short arm: 30 cm
- long arm: 65 cm
• Certification(s): CE EN 354
• Weight: 150 g

FOOTAPE   FOOTCORD   LOOPING

FOOTAPE C47A

Adjustable webbing foot loop

• Attaches to the ASCENSION handled rope clamp or the BASIC rope clamp for rope ascents
• Underfoot strap is abrasion-resistant and is slightly rigid to make it easier to step into
• Elastic keeps foot in loop. It is height adjustable, so it works with any type of shoe and stores easily when not in use
• DoubleBack buckle easily and quickly adjusts length of foot loop
• Weight: 76 g

FOOTCORD C48A

Adjustable cordage foot loop

• Attaches to the ASCENSION handled rope clamp or the BASIC rope clamp for rope ascents
• 100 % Dyneema for increased durability
• Elastic keeps foot in loop. It is height adjustable, so it works with any type of shoe and stores easily when not in use
• Plate for adjusting foot loop length
• Weight: 42 g

LOOPING C25

Four-step etrier

• Can be clipped on the ASCENSION handle for rope ascents or directly onto the anchor for progression in overhangs or roofs
• Underfoot strap is abrasion-resistant and is slightly rigid to make it easier to step into
• Weight: 145 g

CROLL® B16BAA

Chest ascender

Compact, lightweight chest rope clamp
• Used with the ASCENSION handled rope clamp for ascending a rope
• Toothed cam with self-cleaning slot optimizes performance under any conditions (e.g. rope that is icy, muddy, etc.). The stainless steel cam has better resistance to corrosion
• The rope channel is reinforced with stainless steel for greater durability
• Catch is opened by pinching for easy, simple manipulation
• Lower hole is angled to keep the device flat
• Upper hole for attaching a SECUR shoulder strap to keep the rope clamp in position
• Rope diameter: 8-11 mm
• Certification(s): CE EN 567, CE EN 12 841 type B
• Weight: 85 g

SECUR C74A

Shoulder straps for positioning the CROLL rope clamp

• Simple construction for easy donning
• Front and rear DoubleBack buckles for easy, quick adjustment
• Mounts on rear ring of AVAO SIT, FALCON, FALCON ASCENT and SEQUOIA SRT seat harnesses
• Weight: 135 g

VERTICALITY

Left-foot PANTIN   Right-foot PANTIN

PANTIN®

Foot ascender - right and left

• Designed to make rope ascents faster and less tiring
• Used to complement CROLL, ASCENSION or ASCENTREE rope clamps
• Cam facilitates passage of the rope through the device, even on the first few meters
• Toothed cam with self-cleaning slot optimizes performance under any conditions (e.g. rope that is icy, muddy, etc.). The stainless steel cam has better resistance to corrosion
• Mechanism is totally integrated into the body of the rope clamp to help prevent snagging
• Releases from the rope with a simple backwards movement of the foot
• Lower strap is 100 % Dyneema to resist abrasion
• Easy and quick adjustment with DoubleBack buckle
• Available in two versions:
- right foot PANTIN (**B02BRA**): yellow
- left foot PANTIN (**B02BLA**): black
• Rope diameter: 8-13 mm
• Weight: 85 g

Warning: the PANTIN foot ascender is not a PPE.

ASCENTREE B19 WAA

Double-handled rope clamp for tree care

• Designed for ascending double ropes in trees using the footlock technique or with two PANTIN foot ascenders
• Ergonomic molded handles allow a comfortable yet powerful grip
• Toothed cam with self-cleaning slot optimizes performance under any conditions (e.g. rope that is icy, muddy, etc.)
• Catch/cam combination is totally integrated into the body of the rope clamp to prevent rubbing
• Large handles can be used with thick gloves
• Lower holes for connecting a lanyard
• Upper holes for clipping a carabiner around the rope
• For use on half ropes between 8 and 13 mm in diameter
• Certification(s): CE
• Weight: 390 g

RESCUCENDER

MICROCENDER

MICROGRAB

BASIC B18BAA

Compact, versatile rope clamp

• Compact rope clamp for excellent grip
• Versatile: used to ascend a fixed rope, or as progress capture in a hauling system
• Toothed cam with self-cleaning slot optimizes performance under any conditions (e.g. rope that is icy, muddy, etc.). The stainless steel cam has better resistance to corrosion
• Wide lower hole allows lanyard and foot loop carabiners to be easily connected
• Upper hole for clipping a carabiner around the rope
• Rope diameter: 8-11 mm
• Certification(s): CE EN 567, CE EN 12 841 type B
• Weight: 85 g

TIBLOC B01

Emergency rope clamp

• Extremely lightweight and compact: an efficient piece of basic equipment for a worker on a rope or a rescue worker
• Versatile: this rope clamp is easy to use with a locking carabiner for ascending ropes or for setting up hauling systems (progress capture)
• Teeth and a self-cleaning slot optimize performance under any conditions (e.g. rope that is icy, muddy, etc.)
• Attachment hole for keeper cord
• Used on single 8 to 11 mm rope with a locking carabiner having a 10 to 12 mm round or oval cross section (Am'D, WILLIAM, etc.)
• Certification(s): CE EN 567
• Weight: 40 g

RESCUCENDER B50

Cam-loaded rope clamp

• Removable axle can be used to install or remove the clamp at any point on the rope
• Locking pin reduces the risk of undoing the system accidentally
• For single ropes between 9 and 13 mm in diameter
• Certification(s): CE EN 567
• Weight: 250 g

MICROCENDER B54

Cam-loaded rope clamp

• Removable axle can be used to install or remove the clamp at any point on the rope
• Locking pin reduces the risk of undoing the system accidentally
• For single ropes between 9 and 13 mm in diameter
• Certification(s): CE EN 567
• Weight: 160 g

MICROGRAB B53

Cam-loaded rope clamp for permanent installation on a rope

• Bolted axle eliminates risk of accidentally undoing the system; one of the ends of the rope must pass through it
• For single ropes between 9 and 13 mm in diameter
• Certification(s): CE EN 567
• Weight: 175 g

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

VERTICALITY

EPICURE, Usine retraitement des eaux, Pierre Benite, Rhone, France © Lafouche

Pulleys are used to haul up equipment or raise a person in a rescue situation. Some pulleys have an integrated rope clamp to make certain tasks easier. Certain pulleys also allow for movement along a rope or cable: for moving loads or evacuating a person.

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

For easier selection of the appropriate pulley for each need, all Petzl pulleys with ball-bearings are identified by a symbol:

The second symbol represents the maximum rope diameter to be used with each pulley:
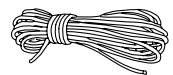
Progress capture pulleys

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

NEW 2014

PRO TRAXION

MICRO TRAXION

High-efficiency pulleys

Versatile, high-performance pulleys adapted for intensive use.

PARTNER

RESCUE

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.

MINI

GEMINI

MINDER

TWIN

Single pulleys

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

MOBILE

FIXE

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.

TANDEM

TANDEM SPEED

Specialized pulleys

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

KOOTENAY

ROLLCAB

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

VERTICALITY

PRO TRAXION P51A

Very efficient drop-resistant progress capture pulley

NEW 2014

Locking button for cam

Attachment hole

Toothed cam

Pulley safety catch (visual indicator when unlocked)

Connection point for hauling

8 ≤ ø ≤ 13 mm
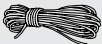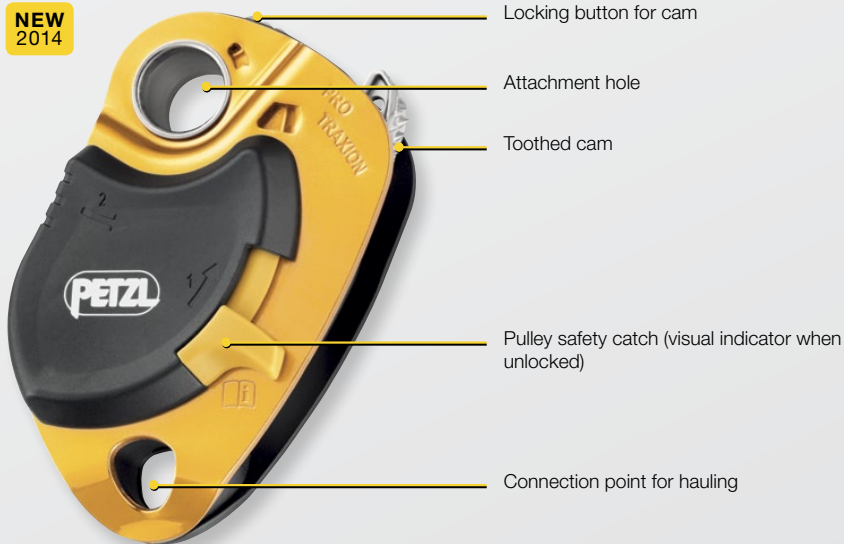
8 ≤ ø ≤ 11 mm

• Drop-resistant pulley:
- allows a rope to be installed when the pulley is connected to the anchor
• Well suited for hauling heavy loads:
- large diameter aluminum sheave mounted on sealed ball bearings for excellent efficiency
- side plate locks when loaded and prevents opening of the pulley during use
• Versatile:
- lower connection point for creating different types of hauling systems
- toothed cam with self-cleaning slot optimizes performance under any conditions: e.g. rope that is icy, muddy, etc.
- may be used as simple pulley by locking the cam in the raised position

Drop-resistant pulley: rope may be installed when pulley is connected to the anchor

MICRO TRAXION P53

Very efficient, ultra-compact progress capture pulley

• Ultra-compact and lightweight
• Versatile:
- toothed cam with self-cleaning slot optimizes performance under any conditions: e.g. rope that is icy, muddy, etc.
- may be used as simple pulley by locking the cam in the raised position
• Aluminum sheave mounted on sealed ball bearings for excellent efficiency

PARTNER

ø ≤ 11 mm

MINI

ø ≤ 11 mm

MINDER

ø ≤ 13 mm

RESCUE

ø ≤ 13 mm

GEMINI

ø ≤ 11 mm

TWIN

ø ≤ 13 mm

PARTNER P52A

Highly efficient ultra-compact pulley

• Ultra-compact and extremely lightweight pulley
• Designed for daily tasks and for on-site rescue (Tyrolean traverse, etc.)
• Sheave mounted on sealed ball bearings for excellent efficiency
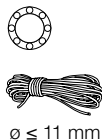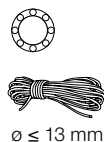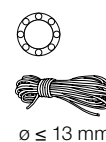
RESCUE

High strength, high efficiency pulley

• For rescue professionals
• Designed to maneuver heavy loads or for intensive use
• Large diameter sheave mounted on sealed ball bearings for excellent efficiency
• Accepts up to three carabiners to facilitate use
• Available in two colors:
- RESCUE red (**P50A**)
- RESCUE black (**P50AN**)

MINI P59A

Highly efficient and lightweight Prusik pulley

• Special side plates designed for use with a Prusik friction hitch in progress capture systems
• Sheave mounted on sealed ball bearings for excellent efficiency
• Compact and lightweight

GEMINI P66A

Highly efficient and lightweight double Prusik pulley

• Special side plates designed for use with a Prusik friction hitch in progress capture systems
• Parallel mounted sheaves and auxiliary attachment point for creating different types of hauling systems
• Sheave mounted on sealed ball bearings for excellent efficiency
• Compact and lightweight

MINDER P60A

High strength, high efficiency Prusik pulley

• Special side plates designed for use with a Prusik friction hitch in progress capture systems
• Large diameter sheave mounted on sealed ball bearings for excellent efficiency
• Accepts up to three carabiners to facilitate use

TWIN P65A

High strength, high efficiency double Prusik pulley

• Special side plates designed for use with a Prusik friction hitch in progress capture systems
• Parallel mounted sheaves and auxiliary attachment point for creating different types of hauling systems, including the most complex
• Large diameter sheaves mounted on sealed ball bearings for excellent efficiency
• Accepts up to three carabiners to facilitate use

VERTICALITY

MOBILE

ø ≤ 13 mm

FIXE

ø ≤ 13 mm

TANDEM

ø ≤ 13 mm

TANDEM SPEED

ø ≤ 13 mm

260 mm

KOOTENAY

470 mm

ROLLCAB
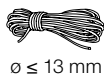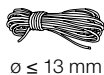
MOBILE P03A

Versatile ultra-compact pulley

• Ultra-compact, lightweight pulley
• Designed for hauling systems and deviations
• Sheave mounted on self-lubricating bushings for efficiency

FIXE

Versatile compact pulley

• Fixed side plates allow quick installation and coupling with a rope clamp
• Designed for hauling systems and deviations
• Sheave mounted on self-lubricating bushings for efficiency
• For use with OK or WILLIAM type carabiner
• Available in two colors:
- FIXE (**P05W**): yellow
- FIXE (**P05WN**): black
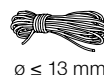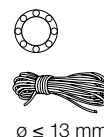
TANDEM P21

Double pulley for Tyrolean traverses on rope

• Aluminum sheaves mounted on self-lubricating bushings for efficiency
• Accepts up to three carabiners to facilitate use

TANDEM SPEED P21 SPE

Double pulley for Tyrolean traverses on cable or rope

• Stainless steel sheaves for excellent durability
• Sheave mounted on sealed ball bearings for excellent efficiency
• Accepts up to three carabiners to facilitate use

KOOTENAY P67

Knot-passing pulley

• Voluminous rope channel allows the passage of joining knots (lifting loads over great distances or moving along a Tyrolean traverse with two ropes)
• Large diameter sheave mounted on sealed ball bearings for excellent efficiency
• Locking pins on the sheave allow use of the pulley as an anchor
• Height: 260 mm

ROLLCAB P47

Roller for moving along cable

• Designed for progression and evacuation along mechanical lift cables
• Large opening and large diameter sheave for use on cables up to 55 mm in diameter
• When progressing, use a back-up lanyard
• Height: 470 mm

Technical data for pulleys

PETZL

	Reference	Certification(s)	Rope diameter	Sheave diameter	Ball bearings	Efficiency	Maximum working load	Weight
Progress capture pulleys								
PRO TRAXION	P51A	CE EN 567 NFPA 1983 Technical Use	8 to 13 mm	38 mm	Yes	95 %	Pulley: 2.5 kN x 2 = 5 kN rope clamp: 2.5 kN	265 g
MICRO TRAXION	P53	CE EN 567	8 to 11 mm	25 mm	Yes	91 %	Pulley: 2.5 kN x 2 = 5 kN rope clamp: 2.5 kN	85 g
High-efficiency pulleys								
PARTNER	P52A	CE EN 12278	7 to 11 mm	25 mm	Yes	91 %	2.5 kN x 2 = 5 kN	56 g
RESCUE	P50A P50AN (black)	CE EN 12278 NFPA 1983 General Use	7 to 13 mm	38 mm	Yes	95 %	4 kN x 2 = 8 kN	185 g
Prusik pulleys								
MINI	P59A	CE EN 12278 NFPA 1983 Technical Use	7 to 11 mm	25 mm	Yes	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	Yes	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	Yes	97 %	4 kN x 2 = 8 kN	295 g
TWIN	P65A	CE EN 12278, NFPA 1983 General Use	7 to 13 mm	51 mm	Yes	97 %	2 x 3 kN x 2 = 12 kN	450 g
Single pulleys								
MOBILE	P03A	CE EN 12278	7 to 13 mm	21 mm	No	71 %	2.5 kN x 2 = 5 kN	75 g
FIXE	P05W (yellow) P05WN (black)	CE EN 12278	7 to 13 mm	21 mm	No	71 %	2.5 kN x 2 = 5 kN	90 g
Transport pulleys								
TANDEM	P21	CE EN 12278	rope ≤ 13 mm	21 mm	No	71 %	10 kN	195 g
TANDEM SPEED	P21 SPE	CE EN 12278	rope ≤ 13 mm cable ≤ 12 mm	26 mm	Yes	95 %	10 kN	270 g
Specialized pulleys								
KOOTENAY	P67	CE EN 12278	8 to 19 mm	76 mm	Yes	-	5 kN x 2 = 10 kN	1390 g
ROLLCAB	P47	CE EN 1909	cable ≤ 55 mm	55 mm	No	-	5 kN	1470 g

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

ASCENDERS

PULLEYS

ANCHORS AND ROPES

PACKS AND ACCESSORIES

VERTICALITY

EPICURE, Usine retraitement des eaux, Pierre Benite, Rhone, France © Lafouche

Rock and concrete anchors

Elements that allow installation of temporary or permanent fixed anchors.

CŒUR

CŒUR GOUJON

COLLINOX

BAT'INOX

Rigging equipment

Swivel devices used to keep the ropes from twisting when the load turns. Rigging plates allow the work station to be organized and increase the number of anchoring options.

SWIVEL S

SWIVEL L

PAW

Anchor straps

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

ANNEAU

CONNEXION

TREESBEE

TREESBEE SCREWLINK

Quick adjustment anchor

GRILLON

Temporary horizontal lifeline

GRILLON

HARNESSES

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VERTICALITY

	COEUR GOUJON		COLLINOX	BAT'INOX
Reference	P32	P33	P55	P57
Weight	85 g	120 g	95 g	250 g
Certification(s)	EN 795 A1 EN 959	EN 795 A1 EN 959	EN 959	EN 959

CŒUR

Type

		COEUR GOUJON		COLLINOX	BAT'INOX
Rock	Granite, gneiss > 80 MPa	• •	• •	• •	• •
	Hard limestone > 80 MPa	• •	• •	• •	• •
	Limestone and medium sandstone 80 MPa to 45 MPa	•	• •	• •	• •
	Soft rock (soft sandstone, limestone) < 45 MPa	No	No	•	• •
Concrete	Very high quality > 50 MPa	•	• •	• •	• •
	Medium quality 25 < x < 50 MPa	No	•	• •	• •

• •: pre-testing recommended / •: pre-testing required

CŒUR GOUJON

Installation

	COEUR GOUJON		COLLINOX	BAT'INOX
Length	55 mm	67 mm	70 mm	100 mm
Drilling depth	≥ 55 mm	≥ 67 mm	70-75 mm	100-105 mm
Diameter	10 mm	12 mm	10 mm	14 mm
Drilling diameter	10 mm	12 mm	12 mm	16 mm
Type of installation	Expansion	Expansion	P56 glue*	P41 glue*
Suggested drying time	-	-	40 min -> 10 h**	40 min -> 10 h**

Performance

	COEUR GOUJON		COLLINOX	BAT'INOX
Resistance to cutting on 50 MPa concrete	25 kN	25 kN	40 kN**	50 kN**
Pull-out strength in 50 MPa concrete	18 kN	18 kN	35 kN**	50 kN**

* Or other glues approved by Petzl.
** Times are given for P41 and P56 glue (times may vary depending on the glue used and on the external environment).

COEUR
Stainless steel bolt hanger

• Available in two versions:
- COEUR (**P34050**): hanger for 10 mm bolts
- COEUR (**P38150**): hanger for 12 mm bolts
• Weight: 40 g
• Certification(s): EN 795 A1

COEUR GOUJON
Complete stainless steel anchor assembly

• Comprised of a COEUR hanger, expansion bolt and nut
• Hanger can be removed
• Available in two versions:
- COEUR GOUJON (**P32**):
COEUR hanger mounted on a 10 mm bolt
- COEUR GOUJON (**P33**):
COEUR hanger mounted on a 12 mm bolt

COLLINOX

AMPOULE COLLINOX

BAT'INOX

AMPOULE BAT'INOX

PAW S

PAW M

PAW L

SWIVEL S

SWIVEL L

COLLINOX P55
Forged stainless steel glue-in bolt

• 10 x 70 mm

AMPOULE
COLLINOX P56
Resin glue for COLLINOX

BAT'INOX P57
Forged stainless steel glue-in bolt

• 14 x 100 mm

AMPOULE
BAT'INOX P41
Resin glue for BAT'INOX

PAW
Rigging plate

• For easy organization of the work area and for creating multiple anchor systems
• 19 mm holes allow the locking sleeves of most carabiners to pass through
• Made of aluminum: excellent strength-to-weight ratio
• Breaking strength: 36 kN
• Available in three sizes:
- PAW S (**P63 S**): small (weight: 55 g)
- PAW M (**P63 M**): medium (weight: 210 g)
- PAW L (**P63 L**): large (weight: 350 g)
• Also available in black:
- PAW S black (**P63 SN**)
- PAW M black (**P63 MN**)
- PAW L black (**P63 LN**)
• Certification(s): CE, NFPA 1983 General Use

SWIVEL
Swivel

• Prevents the rope from twisting when the load is turning
• Excellent performance and reliability due to maintenance-free sealed ball-bearings
• SWIVEL S (**P58 S**):
- designed for one-person loads
- compact
- breaking strength: 23 kN
- weight: 95 g
- Certification(s): CE
• SWIVEL L (**P58 L**):
- designed for two-person loads, up to three connectors can be attached to the ends
- breaking strength: 36 kN
- weight: 150 g
- Certification(s): CE, NFPA 1983 General Use

HARNESSES
HELMETS
LANYARDS AND ENERGY ABSORBERS
MOBILE FALL ARRESTERS
CONNECTORS
DESCENDERS
ASCENDERS
PULLEYS
ANCHORS AND ROPES
PACKS AND ACCESSORIES

VERTICALITY

CONNEXION FIXE

CONNEXION VARIO

CONNEXION FAST

TREESBEE   TREESBEE SCREWLINK

ANNEAU

Webbing loop

• Available in four lengths:
- ANNEAU (**C40 60**): 60 cm (weight: 60 g)
- ANNEAU (**C40 80**): 80 cm (weight: 80 g)
- ANNEAU (**C40 120**): 120 cm (weight: 100 g)
- ANNEAU (**C40 150**): 150 cm (weight: 135 g)
• Also available in black:
- ANNEAU black (**C40 60N**): 60 cm (weight: 60 g)
- ANNEAU black (**C40 80N**): 80 cm (weight: 80 g)
- ANNEAU black (**C40120N**): 120 cm (weight: 100 g)
• Breaking strength: 22 kN
• Certification(s): CE EN 566, CE EN 795 B

CONNEXION FIXE

Anchor strap

• Forged steel D-rings on the ends
• Available in three lengths:
- CONNEXION FIXE (**C42 100**): 100 cm (weight: 335 g)
- CONNEXION FIXE (**C42 150**): 150 cm (weight: 390 g)
- CONNEXION FIXE (**C42 200**): 200 cm (weight: 440 g)
• Breaking strength: 22 kN
• Certification(s): CE EN 795 B

CONNEXION VARIO C42 V

Adjustable anchor strap

• Adjustment buckle allows strap to be adjusted between 80 and 130 cm
• Forged steel D-rings on the ends
• Length: 80 to 130 cm
• Weight: 475 g
• Breaking strength: 22 kN
• Certification(s): CE EN 795 B

CONNEXION FAST C42 F

Rapid adjustment anchor strap

• Rapid adjustment buckle on end allows strap to be adjusted between 20 and 150 cm
• Forged steel D-rings on the ends
• Length: 20 to 150 cm
• Weight: 390 g
• Breaking strength: 18 kN
• Certification(s): CE EN 795 B

TREESBEE
TREESBEE SCREWLINK

False crotch for tree care

• Protects the tree and improves rope glide at the anchor
• Can be retrieved from the ground
• Wide webbing limits twisting
• Triple thickness of termination on large ring side makes the webbing more rigid during retrieval
• Terminations easy to identify with color coding
• Length: 110 cm
• Available with two types of connector:
- TREESBEE (**C04110**): strap with large diameter ring and small ring for ropes with spliced terminations (the splice goes through the small ring), 240 g
- TREESBEE SCREWLINK (**C04110 M**): strap with large diameter ring and quick link (triangle) for ropes with sewn terminations (the link opens to let the sewn termination through), 295 g
• Breaking strength: 23 kN
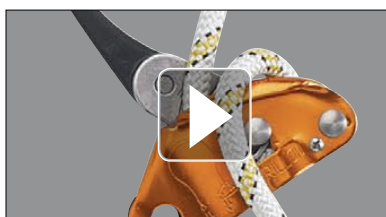• Certification(s): CE EN 795 B

TREESBEE (C04110) is not available in North America

GRILLON

Quick adjustment anchor

• Allows quick installation of an adjustable anchor that is longer than two meters
• The self-jamming device allows easy adjustment of the length and tension at the anchor point (make a mule knot on the GRILLON to lock the anchor)
• Semi-static rope, resistant to aging and abrasion
• Sewn terminations on both ends with plastic sheath to keep the connector in position and protect the rope from abrasion
• Available in four versions (connector not included):
- GRILLON (**L52A 002**): 2 m, 435 g
- GRILLON (**L52A 003**): 3 m, 515 g
- GRILLON (**L52A 004**): 4 m, 595 g
- GRILLON (**L52A 005**): 5 m, 675 g
• Certification(s): CE EN 795 B

GRILLON

Temporary horizontal lifeline

• Allows a horizontal lifeline to be installed quickly when there is a large work surface
• The self-jamming device allows easy adjustment of the length and tension between the two anchor points (make a mule knot on the GRILLON to lock the anchor)
• Semi-static rope, resistant to aging and abrasion
• Sewn terminations on both ends with plastic sheath to keep the connector in position and protect the rope from abrasion
• Available in four lengths:
- GRILLON (**L52A 005**): 5 m, 675 g
- GRILLON (**L52A 010**): 10 m, 1055 g
- GRILLON (**L52A 015**): 15 m, 1455 g
- GRILLON (**L52A 020**): 20 m, 1900 g
• Certification(s): CE EN 795 B

Find all the possibilities of the GRILLON quick adjustment anchor at www.petzl.com/GRILLON.
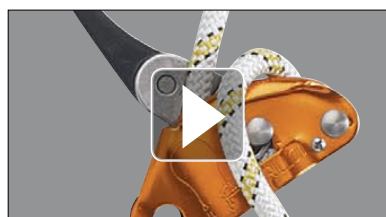
Find all the possibilities of the GRILLON lifelines at www.petzl.com/GRILLON.

VERTICALITY

Profil, VILLA MEDITERRANEE, Région Provence Alpes Côte d'Azur, Marseille, France - Architecte : BOERI Studio, Milano © Lafouche

The line of Petzl ropes is designed for professionals in the vertical world. They offer efficient solutions for the inherent challenges of these activities: difficult access, technical rescue, industry. To provide solutions to clients around the world, Petzl offers ropes that correspond to both European and North American standards.
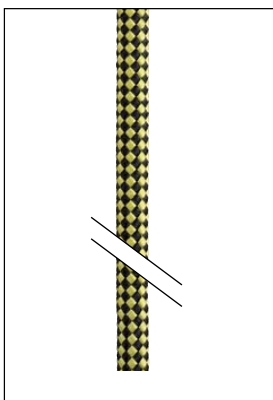
Custom length ropes

(Available only for European standard ropes)

To more precisely respond to the specific needs of some professionals, Petzl offers a personalized service. It is therefore possible to order a rope at a specified length, with high-quality manufactured terminations having a protective sheath on one or both ends. This means that these products are ready for use without adding any knots.
The sewn terminations have a protective sheath that keeps the connector in position and facilitates manipulations.
The manufactured terminations are also stronger than a figure-eight knot and meet certain standards, specifically the EN 353-2 standard (mobile fall arrest system including a flexible anchor line, ASAP + rope).

European standard ropes

PARALLEL 10,5 mm AXIS 11 mm AXIS 11 mm GRIP 12,5 mm LINK 7 mm

North American standard ropes

VECTOR 11 mm VECTOR 12,5 mm RESCUE CORD 8 mm

Rope protectors

PROTEC SET CATERPILLAR ROLL MODULE

HARNESSES

HELMETS

LANYARDS AND ENERGY ABSORBERS

MOBILE FALL ARRESTERS

CONNECTORS

DESCENDERS

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VERTICALITY

PARALLEL 10.5 mm

Semi-static rope for difficult access

• Thin diameter minimizes weight and bulk, requires expertise in controlling a descent
• Flexible, for excellent handling
• Available in three colors for easy differentiation of working rope, lifeline, and common access
• Standard lengths:
- 50 m: white (**R77W 050**)
- 50 m: yellow (**R77Y 050**)
- 50 m: black (**R77N 050**)
- 100 m: white (**R77W 100**)
- 100 m: yellow (**R77Y 100**)
- 100 m: black (**R77N 100**)
- 200 m: white (**R77W 200**)
- 200 m: yellow (**R77Y 200**)
- 200 m: black (**R77N 200**)

• Custom orders by request:
- choice of length (500 m maximum)
- optional sewn terminations on the ends

• Certification(s): CE EN 1891 type A (semi-static ropes)
• Strength tied with a figure eight knot: ≥ 15 kN
• Strength with sewn termination: ≥ 22 kN
• Shock load (factor 0.3): 5.1 kN
• Number of factor 1 falls: 16
• Weight: 65 g/m

AXIS 11 mm

Semi-static, extremely wear-resistant rope with sewn termination

• Standard diameter designed for users who are not necessarily expert in rope techniques
• Available in 10 to 60 m lengths with one sewn termination, for use with an ASAP mobile fall arrester, or in a rescue kit with an I'D S descender
• Sewn termination with protective sheath keeps the connector in the right position and facilitates manipulation
• Standard lengths (sewn termination on the end):
- 10 m: yellow/black (**R74YT 010**)
- 20 m: yellow/black (**R74YT 020**)
- 30 m: yellow/black (**R74YT 030**)
- 40 m: yellow/black (**R74YT 040**)
- 50 m: yellow/black (**R74YT 050**)
- 60 m: yellow/black (**R74YT 060**)

• Certification(s): CE EN 1891 type A (semi-static ropes)
• Strength with sewn termination: ≥ 22 kN
• Shock load (factor 0.3): 5.1 kN
• Number of factor 1 falls: 20
• Weight: 73 g/m

AXIS 11 mm

Versatile rope is very wear-resistant

• Standard diameter designed for users who are not necessarily expert in rope techniques
• Available in three colors for easier identification of different kits
• Standard lengths:
- 50 m: yellow/black (**R74Y 050**)
- 50 m: black (**R74N 050**)
- 100 m: yellow/black (**R74Y 100**)
- 100 m: yellow/white (**R74W 100**)
- 100 m: black (**R74N 100**)
- 200 m: yellow/black (**R74Y 200**)
- 200 m: black (**R74N 200**)

• Custom orders by request:
- choice of length (500 m maximum)
- optional sewn terminations on the ends

• Certification(s): CE EN 1891 type A (semi-static ropes)
• Strength tied with a figure eight knot: ≥ 15 kN
• Strength with sewn termination: ≥ 22 kN
• Shock load (factor 0.3): 5.1 kN
• Number of factor 1 falls: 20
• Weight: 73 g/m

GRIP 12.5 mm

Semi-static, high-strength rope for rescue

• Diameter ensures excellent grip
• Standard lengths:
- 30 m (**R78W 030**)
- 60 m (**R78W 060**)

• **Custom orders by request:**
- **choice of length (250 m maximum)**
- **optional sewn terminations on the ends**

• Certification(s): CE EN 1891 type A (semi-static ropes)
• Strength tied with a figure eight knot: ≥ 15 kN
• Strength with sewn termination: ≥ 22 kN
• Shock load (factor 0.3): 5.2 kN
• Number of factor 1 falls: 20
• Weight: 101 g/m

LINK 7 mm

Control cord

• For guiding a patient during rescue or for hauling gear
• Standard lengths:
- 30 m (**R75W 030**)
- 60 m (**R75W 060**)
- 120 m (**R75W 120**)

• **Custom orders by request:**
- **choice of length (800 m maximum)**
- **optional sewn terminations on the ends**

• Certification(s): CE EN 564
• Strength tied with a figure eight knot: ≥ 7 kN
• Strength with sewn termination: ≥ 10 kN
• Weight: 32 g/m

VERTICALITY

VECTOR 11 mm

Static rope designed for difficult to access environments and for fall protection

• Fusion Process™ helps maintain the rope's shape and gives it excellent handling
• Available in four colors for easier identification of different kits
• Standard lengths:
- 46 m / 150 ft: white (**R1146 W**)
- 46 m / 150 ft: red (**R1146 R**)
- 46 m / 150 ft: blue (**R1146 B**)
- 46 m / 150 ft: black (**R1146 N**)
- 61 m / 200 ft: white (**R1161 W**)
- 61 m / 200 ft: red (**R1161 R**)
- 61 m / 200 ft: blue (**R1161 B**)
- 61 m / 200 ft: black (**R1161 N**)
- 183 m / 600 ft: white (**R11183 W**)
- 183 m / 600 ft: red (**R11183 R**)
- 183 m / 600 ft: blue (**R11183 B**)
- 183 m / 600 ft: black (**R11183 N**)
- 200 m / 656 ft: white (**R11200 W**)
- 200 m / 656 ft: black (**R11200 N**)
- 366 m / 1200 ft: white (**R11366 W**)
- 366 m /1200 ft: black (**R11366 N**)

• Certification(s): NFPA 1983 Technical Use (static ropes)
• Weight: 6 lb/100 ft

VECTOR 12.5 mm

Static rope for fire rescue teams

• Fusion Process™ helps maintain the rope's shape and gives it excellent handling
• Available in six colors for easier identification of different kits
• Standard lengths:
- 46 m / 150 ft: white (**R1246 W**)
- 46 m / 150 ft: red (**R1246 R**)
- 46 m / 150 ft: blue (**R1246 B**)
- 46 m / 150 ft: yellow (**R1246 Y**)
- 46 m / 150 ft: orange (**R1246 O**)
- 61 m / 200 ft: white (**R1261 W**)
- 61 m / 200 ft: red (**R1261 R**)
- 61 m / 200 ft: blue (**R1261 B**)
- 61 m / 200 ft: yellow (**R1261 Y**)
- 61 m / 200 ft: orange (**R1261 O**)
- 183 m / 600 ft: white (**R12183 W**)
- 183 m / 600 ft: red (**R12183 R**)
- 183 m / 600 ft: blue (**R12183 B**)
- 183 m / 600 ft: yellow (**R12183 Y**)
- 183 m / 600 ft: orange (**R12183 O**)
- 183 m / 600 ft: black (**R12183 N**)
- 366 m /1200 ft: white (**R12366 W**)
- 366 m /1200 ft: black (**R12366 N**)

• Certification(s): NFPA 1983 General Use (static ropes)
• Weight: 7.7 lb/100 ft

RESCUE CORD 8 mm

Static rope designed primarily for tying Prusik hitches on VECTOR 11 mm and VECTOR 12.5 mm ropes

• Excellent performance when belaying with the Tandem Prusik technique
• Available in four colors for easier identification of different kits
• Standard lengths:
- 46 m / 150 ft: red (**R846 R**)
- 46 m / 150 ft: orange (**R846 O**)
- 46 m / 150 ft: green (**R846 G**)
- 46 m / 150 ft: black (**R846 N**)
- 92 m / 300 ft: red (**R892 R**)
- 92 m / 300 ft: orange (**R892 O**)
- 92 m / 300 ft: green (**R892 G**)
- 92 m / 300 ft: black (**R892 N**)

• Certification(s): NFPA 1983 Escape (static ropes)
• Weight: 3.3 lb/100 ft

Rope protectors

PETZL®

PROTEC C45 N
Flexible protection

• To help protect a fixed rope from abrasion
• Rugged, lightweight sheath (without PVC)
• Velcro closure and clip for easy and quick installation
• Weight: 95 g

SET CATERPILLAR P68
Articulated protector

• To help protect a moving rope from abrasion
• Modules are connected with quick links: the number of modules can be varied according to the terrain
• Each module can be positioned independently to adapt to the terrain
• Sold as a kit: 4 modules + 6 quick links
• Weight: 1055 g

ROLL MODULE P49
Articulated protector with rollers

• To guide a moving rope and protect it from abrasion
• Vertical and horizontal rollers guide the moving rope with a minimum of rubbing
• Each module can be positioned independently to adapt to the terrain
• Modules are connected with quick links: the number of modules can be varied according to the terrain
• Sold as a kit: 4 modules + 6 quick links + carry bag
• Weight: 1330 g

HARNESSES
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ANCHORS AND ROPES
PACKS AND ACCESSORIES

VERTICALITY

PROFIL, Ecole St Georges, Marseille, France © Lafouche

Durable coated fabric packs

TRANSPORT 45L

PORTAGE 30L

PERSONNEL 15L

BOLTBAG

PORTO

Upright fabric packs

BUCKET 35L

BUCKET 25L

Tree care accessories

JET

AIRLINE

ECLIPSE

Accessories

CORDEX

CORDEX PLUS

NEW 2014

SPATHA

CRAB 6

SPIKY PLUS

VERTICALITY

TRANSPORT 45L S42Y 045

Durable large-capacity bag

• Waistbelt, shoulder straps and back panel are padded for comfort
• Upper flap with inside identification card pocket
• Welded construction for greater strength (PVC free)
• Cordlock closure easy to manipulate, designed for difficult environments
• Side and top handles for carrying by hand
• Upper loop for hauling
• Inside loop for suspending pack in open position
• Capacity: 45 l
• Weight: 1250 g

The new cordlock closure is easy to manipulate and functions in difficult environments

PORTAGE 30L S43Y 030

Durable medium-capacity bag

• Padded shoulder straps for comfortable carriage
• Upper flap with inside identification card pocket
• Welded construction for greater strength (PVC free)
• Cordlock closure easy to manipulate, designed for difficult environments
• Side and top handles for carrying by hand
• Upper loop for hauling
• Inside loop for suspending pack in open position
• Capacity: 30 l
• Weight: 850 g

PERSONNEL 15L

PORTO   BOLTBAG

BUCKET 35L   BUCKET 25L

PERSONNEL 15L S44Y 015

Durable small-capacity bag

• Simple, lightweight design
• Inside flap with identification card pocket
• Welded construction for greater strength (PVC free)
• Cordlock closure easy to manipulate, designed for difficult environments
• Side and top handles for carrying by hand
• Upper loop for hauling
• Capacity: 15 l
• Weight: 450 g

PORTO C33

Webbing equipment loop

• Attaches easily to the pack's internal loop for organizing gear
• Weight: 18 g

BOLTBAG C11 A

Gear pouch

• To organize a hammer, bolting gear and other equipment
• Large pocket closes with a flap and quick buckle
• Small internal pocket, external holster for a hammer and compartment for bits
• Can be worn on a belt
• Weight: 170 g

BUCKET

Fabric pack, remains upright

• Bag remains upright and has an exterior folding lid system that allows easy access to the contents of the bag
• External zippered pocket for personal effects
• Transparent external window for displaying an equipment identification card
• Two large, comfortable carrying handles
• Adjustable strap for carrying bandolier style
• Interior ring can be used as attachment point for rope
• Bottom is lined for longer wear
• Waterproof fabric
• Available in two versions:
- 25-liter BUCKET (**S41Y 025**): 525 g
- 35-liter BUCKET (**S41Y 035**): 630 g

VERTICALITY

JET

AIRLINE

JET

+

AIRLINE

ECLIPSE

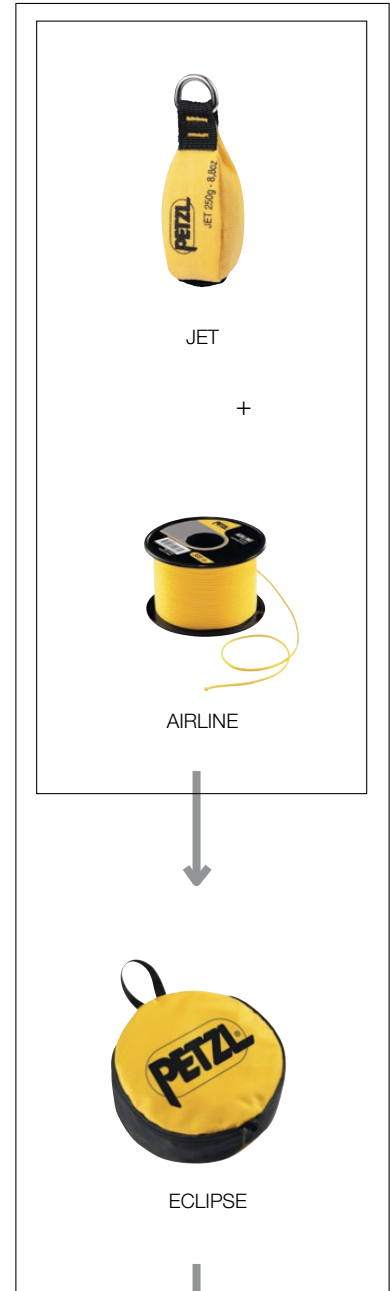BUCKET

JET

Throw-bag

• Durable, two-layer construction prolongs throw-bag life
• Streamlined shape facilitates passage through tree branches
• Different colored stitching on webbing differentiates the bag weights of the bags
• Secondary connection point for quick attachment of the rope
• Yellow for excellent visibility
• Available in three versions:
- JET 250 g (**S02Y 250**)
- JET 300 g (**S02Y 300**)
- JET 350 g (**S02Y 350**)

AIRLINE

Throwline

• Combines flexibility for a precise throw and stiffness for avoiding knot formation as it comes out of the bag
• Excellent sheath-core bond maintains a round cross section, ensuring good rope glide through the tree The sheath is made of Dyneema for excellent abrasion resistance
• Lightweight, does not require a very heavy throw-bag
• Yellow for excellent visibility
• Weight: 2.1 g/m
• Available in two versions:
- AIRLINE 60 m (**R02Y 060**)
- AIRLINE 300 m (**R02Y 300**)

ECLIPSE S03Y

Storage for throw-cord

• Wide opening facilitates packing of AIRLINE cord and JET throw-bag
• Double bottom allows two throw-lines to be stored separately
• Two attachment points to separate the rope ends
• Four mesh pockets to hold the throw-bags
• Can be folded into a small bag (fits perfectly into the BUCKET pack)
• Weight: 500 g

Accessories

SPATHA

CRAB 6   SPIKY PLUS

NEW 2014

CORDEX

Lightweight belay/rappel gloves

• Natural, high-quality leather
• Durable double layer of leather in high-wear areas (fingertips, palm, between thumb and index finger)
• Back made of breathable stretch nylon
• Neoprene cuff with Velcro closure
• Carabiner hole to attach gloves to harness
• Available in different sizes:
- black color:
. S (**K52 SN**)
. M (**K52 MN**)
. L (**K52 LN**)
. XL (**K52 XLN**)
- beige color:
. XS (**K52 XST**)
. S (**K52 ST**)
. M (**K52 MT**)
. L (**K52 LT**)
. XL (**52 XLT**)
• Certification(s): CE

CORDEX PLUS

Lightweight belay/rappel gloves

• Natural, high-quality leather with reinforced palm
• Durable double layer of leather in high-wear areas (fingertips, palm, between thumb and index finger)
• Back is made of durable leather with abrasion-resistant stretch nylon at key flex areas
• Neoprene cuff with Velcro closure
• Carabiner hole to attach gloves to harness
• Available in different sizes:
- black color:
. S (**K53 SN**)
. M (**K53 MN**)
. L (**K53 LN**)
. XL (**K53 XLN**)
- beige color:
. XS (**K53 XST**)
. S (**K53 ST**)
. M (**K53 MT**)
. L (**K53 LT**)
. XL (**K53 XLT**)
• Certification(s): CE

SPATHA S92AN

Knife with carabiner hole

• Smooth/serrated combo blade easily cuts ropes and cordage
• Hole for attaching the knife to the harness with a CARITOOL tool holder or a carabiner
• Two ways to open the blade: with the notch in the blade if bare handed, or with the textured wheel when wearing gloves
• Mechanism for locking the blade in the open position
• Stainless steel blade for improved durability
• Weight: 43 g

CRAB 6 64160

6-point crampons

• For moving on talus and snow- or ice-covered slopes
• Double lateral adjustment adapts to all shoe sizes
• Weight: 2 x 200 g

SPIKY PLUS

Anti-slip soles

• For walking on snow, or on frozen or slippery terrain: rubber soles with tungsten carbide points
• Compatible with all types of footwear: street shoes, sport shoes, boots
• Available in three shoe sizes:
- SPIKY PLUS 1 (**79510**): ≤ 41
- SPIKY PLUS 2 (**79520**): 42...45
- SPIKY PLUS 3 (**79530**): ≥ 46

VERTICALITY

Techniques

Products

MAGNUM , Cirque d'Hiver BOUGLIONE, Paris, France © Stéphan Denys
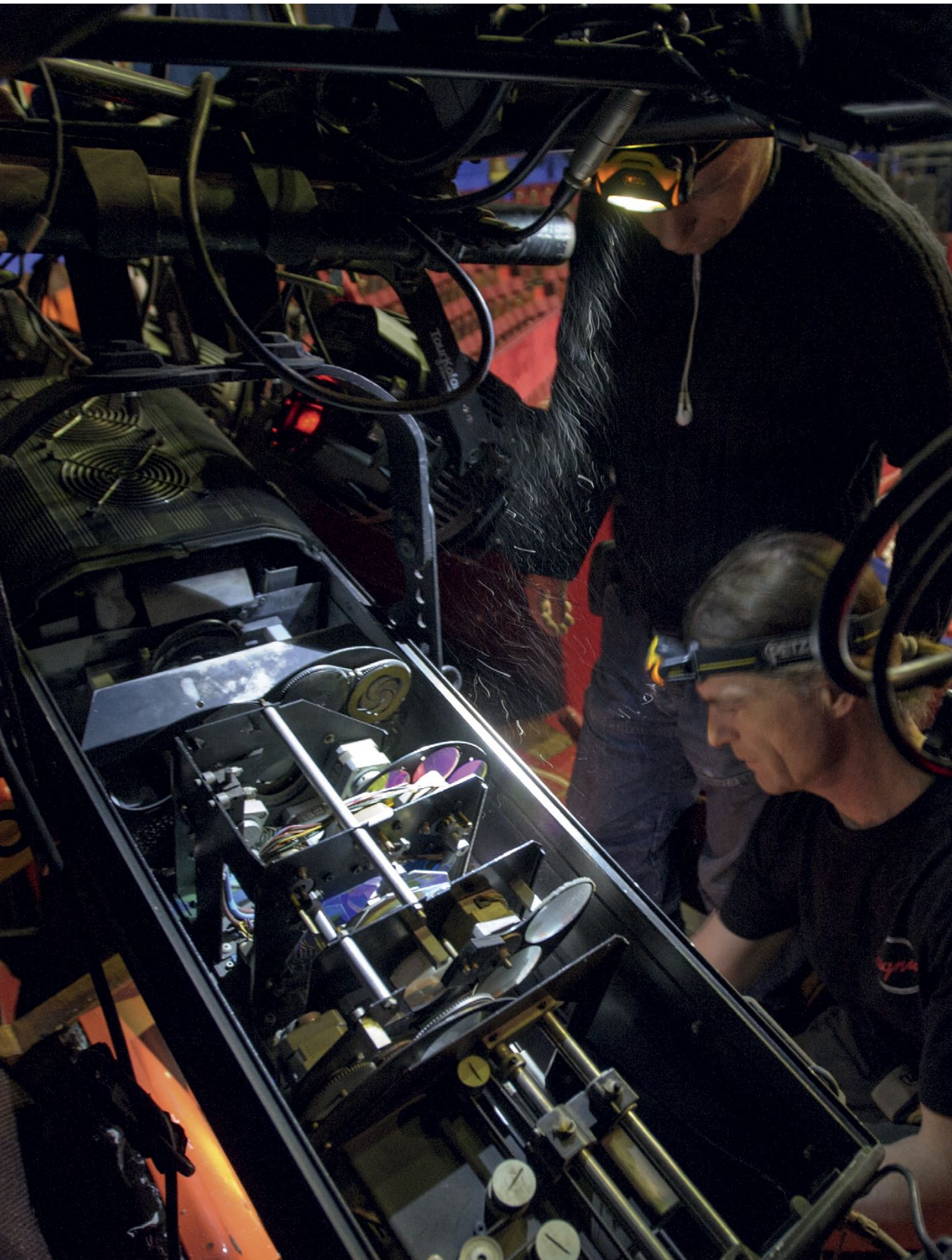
Making an informed choice

With the growing number of headlamps now on the market and the different technologies being used, some explanation is necessary to choose the headlamp best suited to your needs.
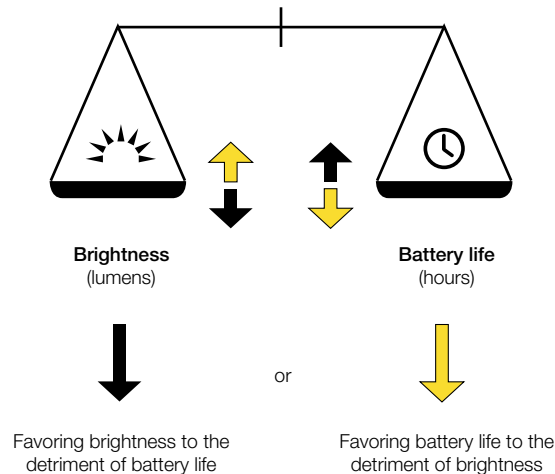
Different ways to use the available energy according to usage

Headlamp energy source:
- batteries
- integrated rechargeable battery

Brightness or battery life: a question of balance

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

Brightness
(lumens)

Battery life
(hours)

or

Favoring brightness to the detriment of battery life

Favoring battery life to the detriment of brightness

Note:
For a compact headlamp worn entirely on the head, the energy source (standard or rechargeable battery) has a limited capacity in order to reduce size and weight for the sake of comfort. In spite of the improved performance of today's LEDs and batteries, this still limits the capacity of a headlamp to provide both significant brightness and long battery life.

Lighting power
The shape of the beam directly affects lighting distance.

Lighting distance depends directly on lighting power, but mainly on the shape of the beam.

In fact, given the same light output, lighting distance will differ depending on the shape of the beam. For example, 100 lumens of light will project to 40 meters with a very wide beam, but up to 100 meters with a narrow beam.

100 lumens   40 m

100 lumens   100 m
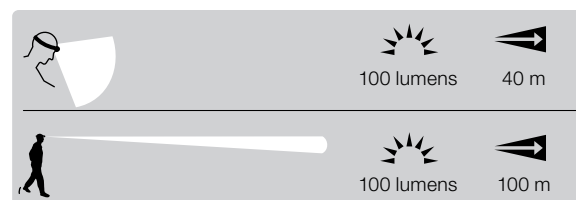
Managing energy: different approaches

A headlamp's energy source can be managed in a number of ways.

STANDARD LIGHTING

Principle: the headlamp supplies energy "directly" to the light source

• Light output decreases progressively as the energy source discharges
The headlamp lights very intensely for the first minutes, and then less and less over the next hours.

• The rated brightness is the maximum light output, measured when the lamp is first turned on. This is the initial light output

Notes:
- the greater the initial brightness of a STANDARD LIGHTING headlamp, the faster it decreases
- when the performance ratings indicate a very high brightness with a very long battery life, one must be aware that these figures often correspond to light output in maximum mode and to battery life in minimum mode. These two characteristics can not be obtained simultaneously
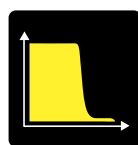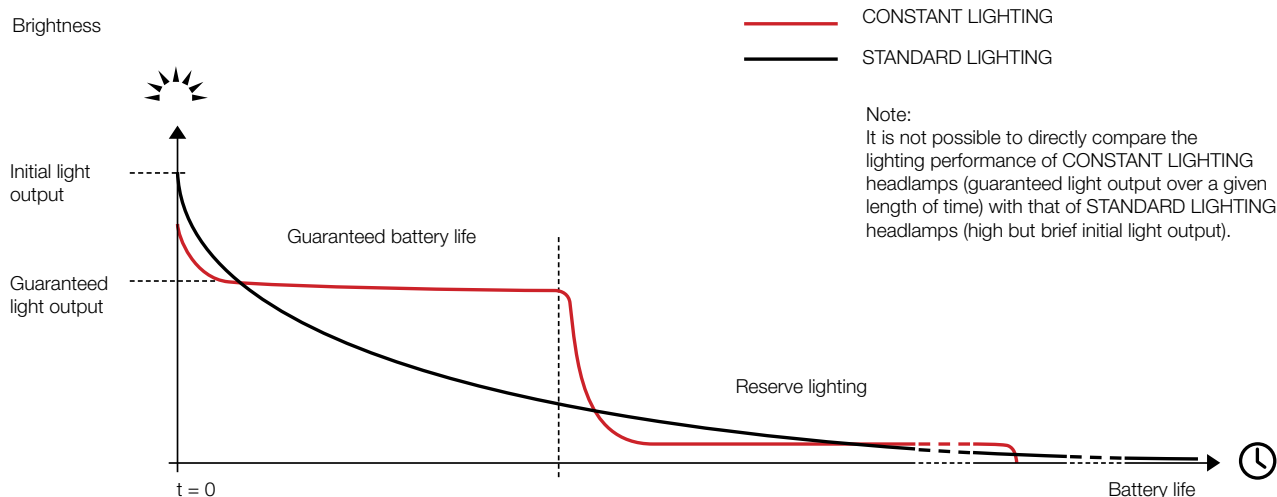
CONSTANT LIGHTING

Principle: the headlamp has an integrated electronic regulation system

• Light output is constant during a predetermined period. The duration corresponds to true usable battery life (and does not include reserve lighting)

• Constant lighting allows the light output measured during this period to be specified. This is the guaranteed brightness

• Most regulated headlamps move to reserve lighting mode when the energy source is nearly depleted (up to several dozen hours for certain products)

Notes: To obtain 100 lumens of brightness for 50 hours, for example, the equivalent of 75 AAA batteries would be required, translating to 1.1 kg on the head! Therefore, Petzl recommends that the user use caution when interpreting the impressive lighting performance claims made for some headlamps.
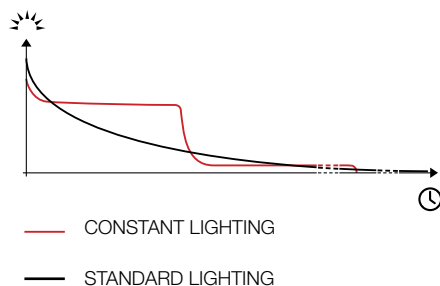
Brightness

—— CONSTANT LIGHTING

—— STANDARD LIGHTING

Note:
It is not possible to directly compare the lighting performance of CONSTANT LIGHTING headlamps (guaranteed light output over a given length of time) with that of STANDARD LIGHTING headlamps (high but brief initial light output).

Initial light output

Guaranteed battery life

Guaranteed light output

Reserve lighting

t = 0

Battery life

Five questions to ask yourself when choosing a headlamp for your needs

1 - Does the energy management of my headlamp suit my needs?

Most Petzl headlamps have constant lighting (regulated headlamps). These headlamps ensure stable lighting performance for a pre-determined period of time. This way, the user knows that neither the luminosity nor the lighting distance will decrease during this period.
When the energy source is almost depleted, the headlamp still has enough reserve power to allow the user to complete the operation under way, or to change his location.

—— CONSTANT LIGHTING

—— STANDARD LIGHTING

2 - Is the energy source appropriate for my frequency of use?

Petzl headlamps function with regular batteries or integrated rechargeable batteries, depending on the model. Each type of energy source corresponds to a user profile:
- regular batteries are best for occasional use, but their cost ends up being greater over time
- integrated rechargeable batteries are designed for more regular or intensive use. They are more practical: the headlamp is always ready to use. They free the user from any battery management issues. These headlamps end up being more economical over time, and more ecological

PIXA 3 headlamp with regular batteries

PIXA 3R headlamp with integrated rechargeable battery

3 - Are the different lighting modes appropriate for my professional activities?

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.

Each mode is characterized by:
- the shape of the beam (wide, focused, mixed etc.)
- corresponding lighting performance (light output, lighting distance, and battery life)

Examples of lighting modes for PIXA 3

Petzl advantages:

Regulated headlamps are more reliable and become real tools for the workplace, a companion during all your daily tasks.

Petzl advantages:

Petzl has chosen to use the highest performance technology for its PIXA and ULTRA headlamps: Lithium-Ion. These batteries ensure very low self-discharge rates, and very high performance at low temperatures.
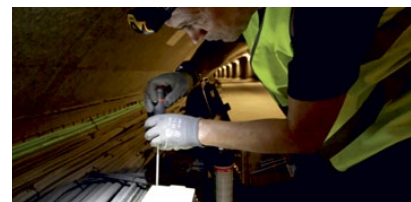
Petzl advantages:

This way each user can opt for a desired level of performance and versatility in order to choose a headlamp best adapted to his needs.

4 - Does the light ensure visual comfort?

To ensure optimal lighting, the body of the headlamp must be designed with extreme precision and equipped with the highest-quality components.

Petzl headlamps benefit from over 30 years of experience in the domain of lighting. This recognized expertise allows Petzl's R&D department to implement innovative solutions that maximize efficiency and reliability.

All Petzl headlamps are equipped with LEDs whose quality is guaranteed and constant. The LEDs we use meet our precise requirements. 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.

## 5 - Is the construction of the headlamp adapted to my working environment?

Petzl headlamps are designed to withstand the most severe conditions of use and to ensure maximum reliability.

This is why each model must pass particularly stringent tests:
- for shock resistance, fall resistance and crushing (including at low temperatures)
- for functional reliability (mechanical endurance)
- individually, when they come off the assembly line (final quality)
- for watertightness

Perfectly uniform beam: comfort of use
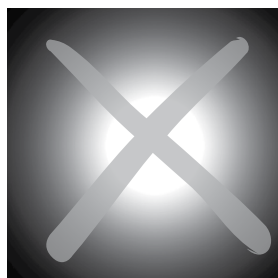
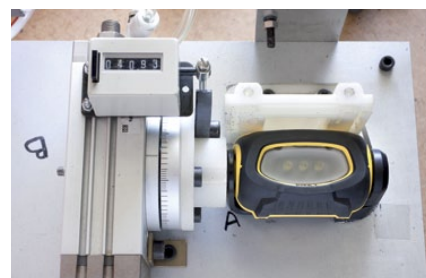Presence of a central bright spot: blinding
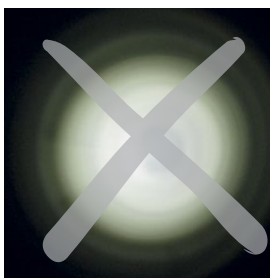
Presence of visual defects: lack of precision, discomfort, fatigue

Impact resistance test

Individual test for lighting performance
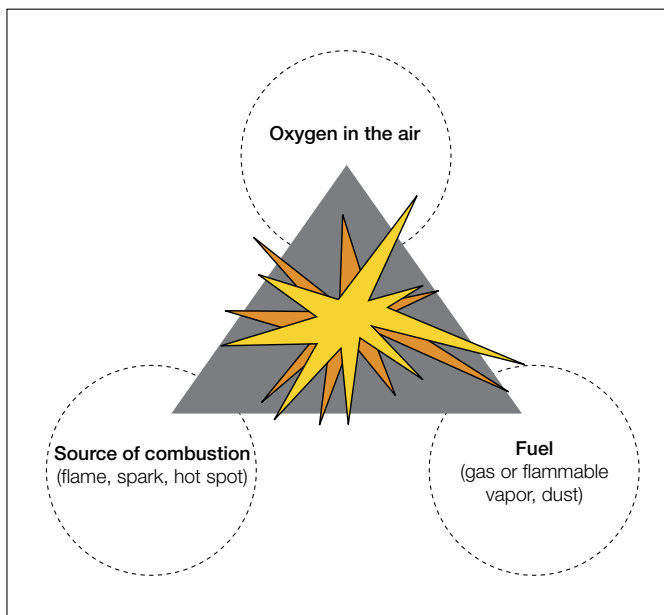
Functionality test

Petzl advantages:

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.

Petzl advantages:

Most Petzl headlamps ensure excellent protection against liquids and solids (see Protection Index page).

Explosive environments (ATEX and HAZLOC standards)

Under what conditions can an explosion occur?

There is a risk of explosion when several elements are present:
- an oxidant: the oxygen in air, for example
- a fuel:
. gas or vapors: hydrocarbons, solvents, varnishes, diluents, gas, alcohol, dyes, perfumes, chemical products, agents for manufacture of plastics, etc.
. powders and dust: magnesium, aluminum, sulfur, cellulose, cereals, carbon, wood, milk, resins, sugars, starch, polystyrenes, fertilizer, etc.
- a hot spot or a source of combustion

For example, when filling a grain silo, the concentration of dust is very high. The environment then is dangerous: a rise in temperature, or even a spark, can trigger an explosion.

If a risk of explosion is identified in an environment (gas or dust), a safety requirement is imposed for the use of equipment that is specifically designed to function without becoming a potential source of combustion. This equipment offers different types of protection designed to diminish the risk of explosion.

The ATEX standard

What is the ATEX?
The ATEX regulation is a European directive which requires all heads of organizations to fully understand the risks related to certain explosive environments. To do this, an evaluation of the risk of explosion in a company is required in order to identify any locations where explosive environments could form, and then to put in place the means to avoid explosion.

How do you choose equipment that is adapted for an environment at risk of explosion?
ATEX environments are subdivided into three zones:
- zones 0, 1 or 2 for gases
- zones 20, 21 or 22 for dust

There are two groups of materials:
- Group I: concerns mines (more restrictive)
- Group II: concerns all above-ground industries

For Group II (above-ground industries), a specifically adapted category of equipment is associated with each ATEX zone classification.

See more details at www.petzl.com/atex.

The HAZLOC standard

What is the HAZLOC?
The HAZLOC certification primarily concerns North America.
It aims to control the risks related to explosion in certain environments.
It comprises two elements:
- testing and evaluation of products being used
- inspection of the factory

How do you choose equipment that is adapted for an environment at risk of explosion?
Hazardous locations are classified in three ways under the HAZLOC standard:
- by type
- by conditions
- by nature of the hazardous substance or material

See more details at www.petzl.com/hazloc.

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 ≥ 50 mm in diameter	Ø 50mm
2 = Protected against projection of solids ≥ 12.5 mm in diameter	Ø 12,5mm
3 = Protected against projection of solids ≥ 2.5 mm in diameter	Ø 2,5mm
4 = Protected against projection of solids ≥ 1 mm in diameter	Ø 1mm
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)	15°
3 = Protected against rain (60° from vertical)	60°
4 = Protected against sprayed water	
5 = Protected against jets of water	
6 = Protected against forceful hose-projected water	
7 = Temporary immersion (-1 meter for 30 minutes)	
8 = Prolonged immersion (deeper than 1 meter for period defined by manufacturer)	

Electromagnetic compatibility (EMC)

The electromagnetic compatibility (EMC) describes the ability of an electric device to work properly, independent of possible electromagnetic disturbances in the environment, and without producing its own. All Petzl headlamps conform to the requirements of the 89/366/CEE directive concerning electromagnetic compatibility: they will not interfere with any other CE-marked devices.

The ANSI/NEMA FL1 standard

This standard was developed with the collaboration of the 14 principal manufacturers of portable lighting, including Petzl. The ANSI/NEMA FL1 standard defines a common protocol for measuring lighting performance. The goal is to allow comparison of different brands of headlamps along the same points of reference.
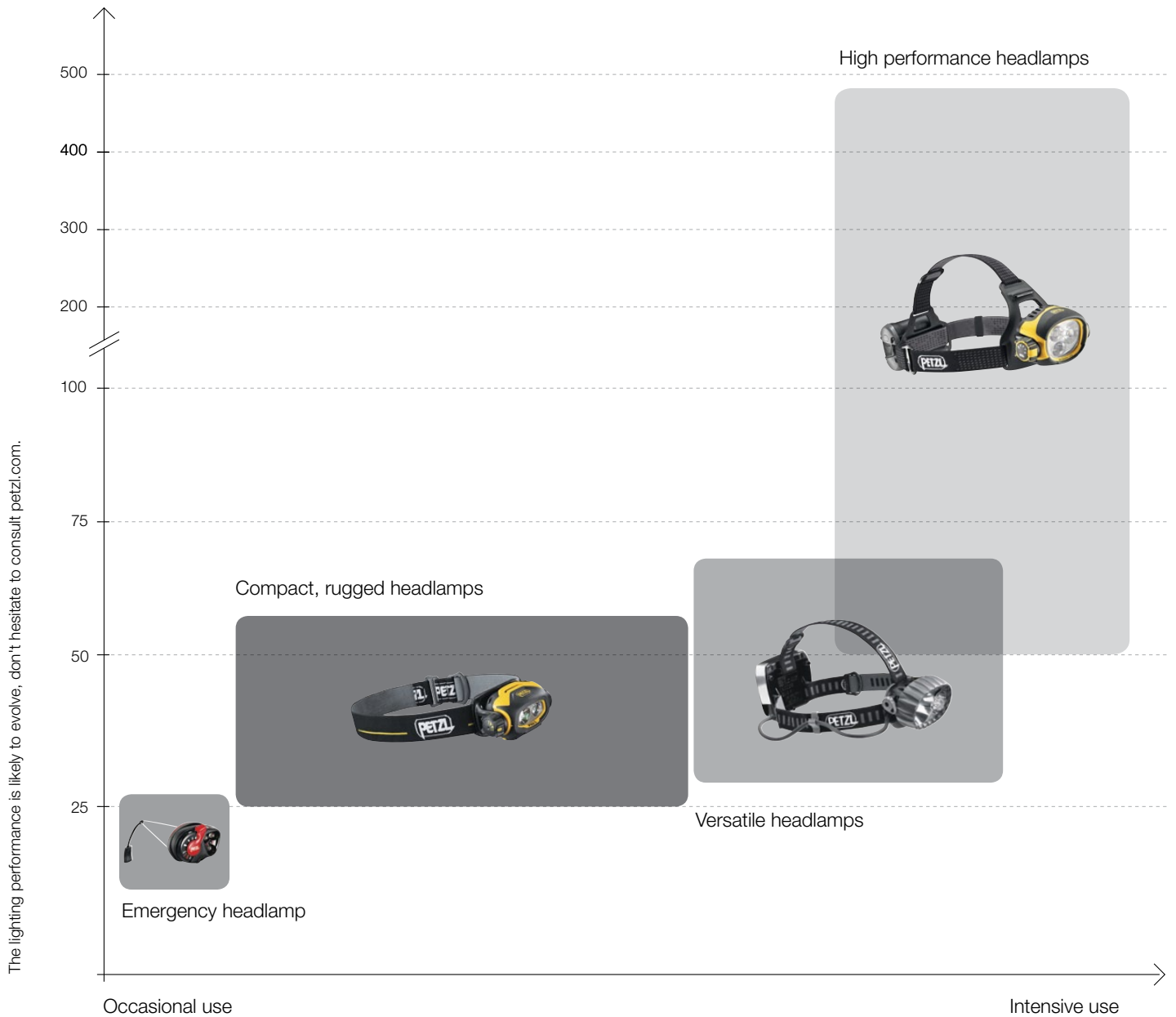Note: The ANSI/NEMA FL1 standard doesn't take into account the way energy is managed and does not therefore permit direct comparison of constant lighting performance with declining lighting performance (See Making an informed choice).

For more information, please consult www.petzl.com/ANSI.

A headlamp specialist for more than 40 years, Petzl has been inventing and developing equipment that offers professionals maximum freedom and efficiency for working in the dark.
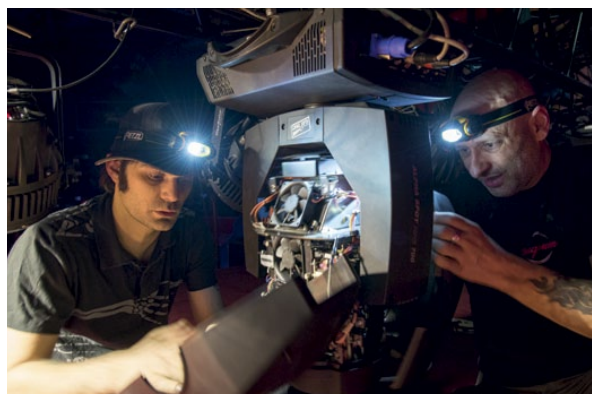
Based on numerous field tests, Petzl headlamps are designed to ensure better ergonomics under any environmental conditions and for any type of operation: workshops, industry, public works and structures, rescue operations, etc.

Lighting power (lumens)

High performance headlamps

Compact, rugged headlamps

Versatile headlamps

Emergency headlamp

The lighting performance is likely to evolve, don't hesitate to consult petzl.com.

Occasional use   Intensive use

Compact, rugged headlamps

Headlamps for daily use

Versatile headlamps

Headlamps for intensive use

High performance headlamps

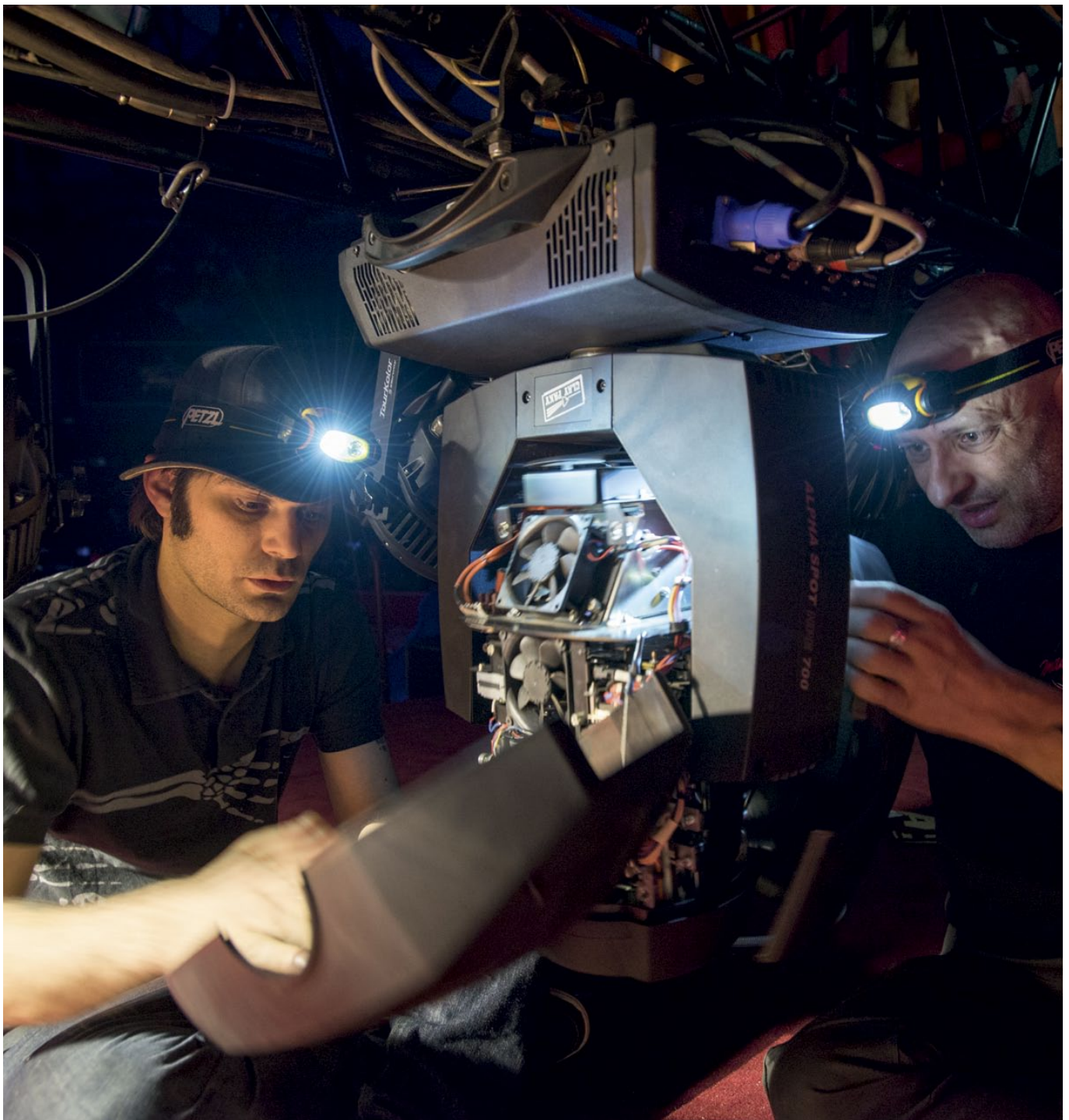Headlamps designed for intensive use and maximum lighting power

Emergency headlamp

Headlamp to keep on hand for when the need arises

HEADLAMPS COMPACT AND RUGGED

HEADLAMPS VERSATILE

HEADLAMPS HIGH PERFORMANCE

EMERGENCY HEADLAMP

LIGHTING

MAGNUM , Cirque d'Hiver BOUGLIONE, Paris, France © Stéphan Denys

PIXA is a line of headlamps designed specifically for professionals who regularly work in the dark. They provide lighting while keeping the hands free for efficient, comfortable work. Their major strengths: rugged, reliable, easy to use, and versatile. This line comes in four models adapted for different uses.
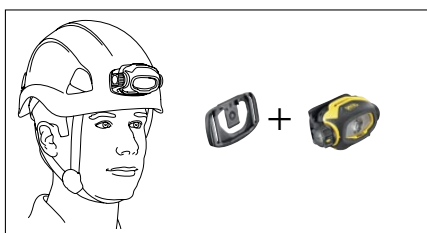

Find more about the PIXA line at
www.petzl.com/PIXA.

PETZL.COM
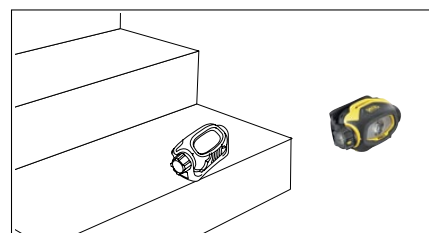
Three ways to wear them

To meet the specific needs of each work situation, PIXA headlamps may be worn directly on the head (with the elastic headband), mounted without the headband on a Petzl VERTEX or ALVEO helmet (with the included mounting plate), or placed on the ground.
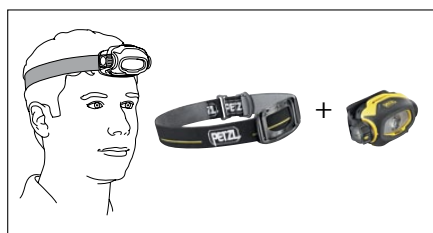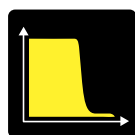
On the head   On a Petzl helmet   Placed on the ground
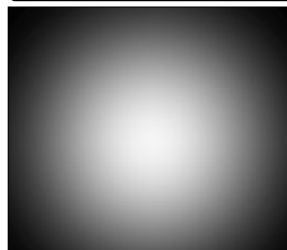
CONSTANT LIGHTING

Integrated electronic power regulation in PIXA headlamps guarantees lighting that does not decrease as the batteries are drained.
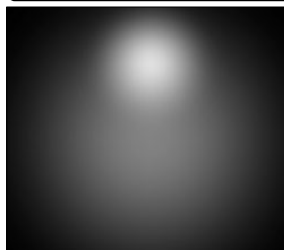
CONSTANT
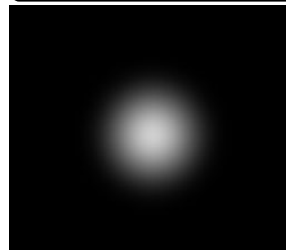LIGHTING

Many types of lighting

PIXA headlamps offer different lighting options in order to better meet the needs of professionals. They provide uniform lighting in the work zone.

Wide beam for close work   Mixed beam for moving around   Focused beam for distance vision

Rugged construction

Easy to use

The rotating selector knob is easy to access and manipulate, even while wearing gloves. This dial allows quick, straightforward selection of different lighting modes.

Great mechanical strength

Shocks, falls, crushing: these lamps are designed to endure the daily rigors of a professional work site.

Storage position

The storage position of the PIXA headlamp keeps the lens protected and locks the selector knob to prevent accidentally turning it on in the toolbox.

Watertightness

PIXA headlamps are waterproof and remain completely operational even after complete immersion (degree of protection IP 67).

Chemical resistance

In order to ensure reliable functioning in harsh environments, these headlamps have been tested for resistance to a number of substances (detailed list at www.petzl.com).

ATEX and HAZLOC certifications

PIXA headlamps are also designed for use in explosive environments.

PIXA 3R

Rechargeable, multi-beam headlamp for frequent use, suitable for proximity lighting, movement and long-range vision, with CONSTANT LIGHTING technology.

PIXA 3

Multi-beam headlamp suitable for proximity lighting, movement and long-range vision, with CONSTANT LIGHTING technology

PIXA 2

Headlamp suitable for proximity lighting and movement, with CONSTANT LIGHTING technology.

PIXA 1

Headlamp suitable for proximity lighting, with CONSTANT LIGHTING technology.

Accessories

| RUBBER | POCHE | RECHARGEABLE BATTERY FOR PIXA 3R | CAR CHARGER |

HEADLAMPS
COMPACT AND RUGGED

HEADLAMPS
VERSATILE

HEADLAMPS
HIGH PERFORMANCE

EMERGENCY HEADLAMP

PIXA 3R E78CHR

Rechargeable, multi-beam headlamp for frequent use, suitable for proximity lighting, movement and long-range vision, with CONSTANT LIGHTING technology

Charging dock for directly charging the headlamp without removing the battery. The battery may also be charged alone to allow the user to continue using the headlamp with a second battery.

Multi-beam: multiple lighting modes for close range work, for movement or for long-range vision.

Find more about the PIXA 3R at www.petzl.com/PIXA.

• Headlamp keeps hands free for work and can be worn:
- on the head with the headband
- attached to a VERTEX (2011 version and later) or ALVEO helmet with the included mounting plate
- placed on the ground
• For frequent use, with integrated rechargeable Lithium-Ion polymer battery and quick charging dock (3 hours)
• CONSTANT LIGHTING technology ensures brightness that does not gradually decrease as the battery drains
• Several lighting modes adapt to each situation:
- a mode adapted for close range work: wide, uniform beam
- a mode adapted for movement: mixed beam with focused component allows user to move around comfortably
- a mode adapted for long-range vision: focused beam
• Battery life parameters may be used to adapt lighting performance to need (by rapidly turning the knob):
- STANDARD: power / battery life balance
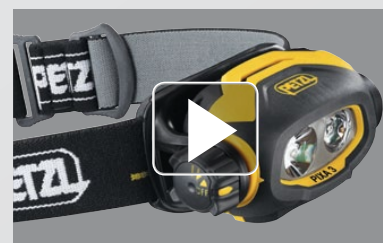- MAX AUTONOMY: battery life prioritized
- MAX POWER: power prioritized

• Lighting for professionals that is reliable, practical and durable:
- automatically switches to reserve mode when battery is almost drained (signaled by blinking light and red indicator)
- knob is easy to use, even with gloves on
- storage position helps protect the headlamp lens and prevents inadvertently turning it on
- charging dock for direct charging of the headlamp itself or only the battery
- may be used in explosive atmospheres (ATEX: Zone 2/22)
- excellent resistance to falls (2 m), impacts, and crushing (80 kg)
- comfortable and washable elastic headband
- resistant to chemicals (see www.petzl.com/PIXA)
• Weight: 145 g
• Power: Li-Ion Polymer 930 mAh battery
• Certification(s):
- CE
- ATEX: CE0080, Ex II 3 GD, Ex nAnL IIB T4
- ANSI/NEMA FL1
• Watertightness: IP 67 (waterproof to -1 m for 30 minutes, no maintenance required after immersion)
• 3-year guarantee (battery 1 year or 300 cycles)

CONSTANT LIGHTING

	STANDARD			MAX AUTONOMY			MAX POWER		
(close)	25 lm	15 m	12 h	25 lm	15 m	**12 h**	**55 lm**	25 m	3 h
(movement)	35 lm	35 m	6 h	25 lm	25 m	**12 h**	**55 lm**	45 m	3 h
(long-range)	55 lm	75 m	3 h	25 lm	40 m	**12 h**	**55 lm**	75 m	3 h

Reserve lighting: lights to 5 lumens minimum for 2 hours

PIXA 3 E78CHB

Multi-beam headlamp suitable for proximity lighting, movement and long-range vision, with CONSTANT LIGHTING technology
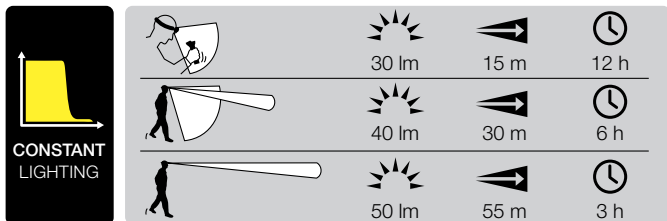
• Headlamp keeps hands free for work and can be worn:
- on the head with the headband
- attached to a VERTEX (2011 version and later) or ALVEO helmet with the included mounting plate
- placed on the ground
• CONSTANT LIGHTING technology ensures brightness that does not gradually decrease as the battery drains
• Several lighting modes adapt to each situation:
- a mode adapted for close range work: wide, uniform beam
- a mode adapted for movement: mixed beam with focused component allows user to move around comfortably
- a mode adapted for long-range vision: focused beam
• Lighting for professionals that is reliable, practical and durable:
- automatically switches to reserve mode when battery is almost drained (signaled by blinking light and red indicator)
- knob is easy to use, even with gloves on
- storage position helps protect the headlamp lens and prevents inadvertently turning it on
- may be used in explosive atmospheres (ATEX: Zone 2/22).
- excellent resistance to falls (2 m), impacts, and crushing (80 kg)
- comfortable and washable elastic headband
- resistant to chemicals (see www.petzl.com/PIXA)
• Weight: 160 g
• Power: two AA/LR06 batteries (included)
• Battery compatibility: rechargeable Ni-MH and lithium
• Certification(s):
- CE
- ATEX: CE0080, Ex II 3 GD, Ex nAnL IIB T4
- HAZLOC: class I Groups C & D div II, Class II Group G div II (certifications guaranteed only with alkaline batteries)
- ANSI/NEMA FL1
• Watertightness: IP 67 (waterproof to -1 m for 30 minutes, no maintenance required after immersion)
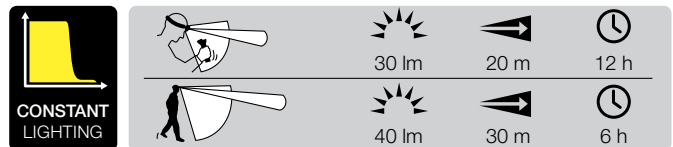• 3-year guarantee

PIXA 2 E78BHB

Headlamp suitable for proximity lighting and movement, with CONSTANT LIGHTING technology

• Headlamp keeps hands free for work and can be worn:
- on the head with the headband
- attached to a VERTEX (2011 version and later) or ALVEO helmet with the included mounting plate
- placed on the ground
• CONSTANT LIGHTING technology ensures brightness that does not gradually decrease as the battery drains
• Several lighting modes adapt to each situation:
- a mode adapted for close range work: mixed beam with a wide, uniform flood
- modes adapted for movement: mixed beam with focused component allows user to move around comfortably
• Lighting for professionals that is reliable, practical and durable:
- automatically switches to reserve mode when battery is almost drained (signaled by blinking light)
- knob is easy to use, even with gloves on
- storage position helps protect the headlamp lens and prevents inadvertently turning it on
- may be used in explosive atmospheres (ATEX: Zone 2/22).
- excellent resistance to falls (2 m), impacts, and crushing (80 kg)
- comfortable and washable elastic headband
- resistant to chemicals (see www.petzl.com/PIXA)
• Weight: 160 g
• Power: two AA/LR06 batteries (included)
• Battery compatibility: rechargeable Ni-MH and lithium
• Certification(s):
- CE
- ATEX: CE0080, Ex II 3 GD, Ex nAnL IIB T4
- HAZLOC: class I Groups C & D div II, Class II Group G div II (certifications guaranteed only with alkaline batteries)
- ANSI/NEMA FL1
• Watertightness: IP 67 (waterproof to -1 m for 30 minutes, no maintenance required after immersion)
• 3-year guarantee

PIXA 3 — CONSTANT LIGHTING

	lm	m	h
	30 lm	15 m	12 h
	40 lm	30 m	6 h
	50 lm	55 m	3 h

Reserve lighting: lights to 5 lumens minimum for 10 hours

PIXA 2 — CONSTANT LIGHTING

	lm	m	h
	30 lm	20 m	12 h
	40 lm	30 m	6 h

Reserve lighting: lights to 5 lumens minimum for 10 hours

RUBBER   POCHE

RECHARGEABLE BATTERY   CAR CHARGER
FOR PIXA 3R

PIXA 1 E78AHB

Headlamp suitable for proximity lighting, with CONSTANT LIGHTING technology

• Headlamp keeps hands free for work and can be worn:
- on the head with the headband
- attached to a VERTEX (2011 version and later) or ALVEO helmet with the included mounting plate
- placed on the ground
• CONSTANT LIGHTING technology ensures brightness that does not gradually decrease as the battery drains
• Ideal lighting mode for all close-range work: wide, uniform beam
• Lighting for professionals that is reliable, practical and durable:
- automatically switches to reserve mode when battery is almost drained (signaled by blinking light)
- knob is easy to use, even with gloves on
- storage position helps protect the headlamp lens and prevents inadvertently turning it on
- may be used in explosive atmospheres (ATEX: Zone 2/22)
- excellent resistance to falls (2 m), impacts, and crushing (80 kg)
- comfortable and washable elastic headband
- resistant to chemicals (see www.petzl.com/PIXA)
• Weight: 160 g
• Power: two AA/LR06 batteries (included)
• Battery compatibility: rechargeable Ni-MH and lithium
• Certification(s):
- CE
- ATEX: CE0080, Ex II 3 GD, Ex nAnL IIB T4
- HAZLOC: class I Groups C & D div II, Class II Group G div II (certifications guaranteed only with alkaline batteries)
- ANSI/NEMA FL1
• Watertightness: IP 67 (waterproof to -1 m for 30 minutes, no maintenance required after immersion)
• 3-year guarantee

RUBBER E78002

Rubber headband for PIXA headlamp, compatible with all helmet types

• Ideal for industrial helmets that are not equipped with positioning hooks for the headband
• The rubber holds the headlamp securely on the helmet
• The plate allows quick and easy mounting of the headlamp onto the headband
• May be used in all situations, including harsh environments (rubber is very durable)
• Buckle adjustment system is easy to use
• 3-year guarantee

POCHE E78001

Carry pouch for PIXA headlamp

• Quick opening flap system with push-button
• Can be carried safely on the waistbelt, thanks to its push-button locking strap
• 3-year guarantee

Rechargeable battery for PIXA 3R E78003

Rechargeable Lithium-Ion Polymer battery, 930 mAh

• Rechargeable separately or in the headlamp; charging dock included with PIXA 3R headlamp
• Quick charge in 3 hours
• Guaranteed for one year or 300 charging cycles

Car charger E93111

12 V car adapter for standard USB

• Allows the PIXA 3R headlamp to be recharged with a USB cable and the charging dock included with the PIXA 3R
• Quick charge in 3 hours
• 3-year guarantee

CONSTANT
LIGHTING

25 lm   15 m   12 h
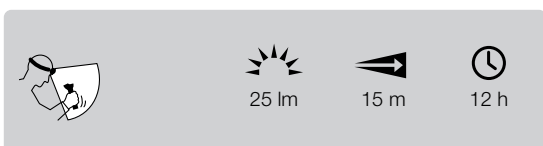
Reserve lighting: lights to 5 lumens minimum for 10 hours

Centrale hydroélectrique EDF de Super Bissorte, Modane, France © Patt Dion

DUO headlamps are designed for professionals working in difficult conditions. These headlamps are waterproof. They are resistant to shock, abrasion, dirt and water. The design features of these headlamps make them a high-performance option for lighting. DUO headlamps have two light sources that can be oriented to provide long-range or close-range lighting, depending on the need.

Hybrid lighting

The two light sources provide versatile lighting adapted to most work situations: they allow close-range lighting with an LED light source, or long-range lighting with a halogen bulb or 1 W LED.

Switch

The on/off switch of the headlamp can be manipulated with one hand and can be locked by flipping the yellow lever to avoid accidentally turning on the lamp.

Waterproof battery case

Designed for demanding environments, DUO headlamps have a battery case that resists the most difficult conditions. The two metal hooks ensure that the lid locks perfectly and is waterproof to -5 meters.

HEADLAMPS
COMPACT AND RUGGED

HEADLAMPS
VERSATILE

HEADLAMPS
HIGH PERFORMANCE

EMERGENCY HEADLAMP

ATEX hybrid headlamp

Headlamp for use in hazardous locations

DUO ATEX LED 5

Hybrid headlamps

Headlamps designed for intensive use in any conditions.
Available in standard version (lamp + battery case on the head) to reduce bulk or in BELT version (with remote battery pack on waistbelt) to reduce weight worn on the head.

DUO LED 5

DUO LED 14

FIXO DUO LED 14

DUO LED 14 ACCU

DUOBELT LED 5

DUOBELT LED 14

Accessories

ACCU DUO ATEX

ACCU DUO

Chargeurs DUO

MODU'LED 14 DUO

CROCHLAMP S
CROCHLAMP L

DUO® ATEX LED 5 E61L5 4

Hybrid waterproof headlamp for use in hazardous locations: 1 high-output LED/5 LEDs

Adjustable elastic bands

Waterproof battery case and lamp body (down to -5 m)

Hybrid light source

Standard European and USA charger

• All-terrain, rugged, headlamp that is waterproof to -5 meters
• Two light sources to choose from, depending on the activity:
- one high-output LED for long-range, focused lighting with adjustable zoom
- five LEDs for flood beam lighting with a long burn time
• Comfortable and easy to use:
- adjustable and comfortable elastic headband
- on/off switch can be locked to prevent accidental operation
- light body can be tilted
• Lamp comes with:
- intrinsically safe rechargeable battery E61100 2 (Ni-MH, 2700 mAh)
- E65200 2 European and USA charger (110/240 V - 50/60 Hz compatible)
• Waterproof down to -5 meters: IP 68
• Weight: 340 g (including rechargeable battery)
• ATEX certified: headlamp may be used in areas containing gas (zones 1 and 2) and in areas containing dust (zones 21 and 22) where the auto-combustion temperature is greater than 200 °C at one atmosphere of pressure (200 °C = maximum surface temperature of the lamp)

• Certification(s):
- ATEX: Ex II 2 GD, Ex ia IB T3, Ex iaD 21 T200 °C
- CE EN 50014, EN 50020
- CEI 61241-0, CEI 61241-11
• Usage temperature: -5° C to +40° C
• CE
• 3-year guarantee

The hybrid light source has five LEDs for wide proximity lighting and one high-output LED for adjustable focused distance lighting

Ni-MH rechargeable battery with intrinsic safety feature for explosive environments reduces the risk of an electric arc or overheating

The lighting performance is likely to evolve, don't hesitate to consult petzl.com.

HEADLAMPS
COMPACT AND RUGGED

HEADLAMPS
VERSATILE

HEADLAMPS
HIGH PERFORMANCE

EMERGENCY HEADLAMP

DUO LED 5

DUO LED 14

DUOBELT LED 5

DUOBELT LED 14   FIXO DUO LED 14

DUO® LED 5

Hybrid waterproof headlamp: halogen/5 LEDs

• All-terrain, rugged, headlamp that is waterproof to -5 meters
• Two light sources to choose from, depending on the activity:
- halogen light for long-range, focused lighting
- five LEDs for flood beam lighting with a long burn time
• Comfortable and easy to use:
- adjustable and comfortable elastic headband
- on/off switch can be locked to prevent accidental operation
- light body can be tilted
• Spare halogen bulb in the light body of the headlamp
• Waterproof down to -5 meters: IP X8
• Certification(s): CE
• 3-year guarantee

• Available in two versions:
- DUO LED 5 (**E69 P**):
operates on four AA/ LR6 batteries (included), or with optional ACCU DUO rechargeable battery pack (E65100 2). Weight: 300 g including batteries
- DUOBELT LED 5 (**E73 P**):
remote battery pack can be worn on the belt, reducing the weight carried on the head, operates on four C/LR14 batteries (included).
Weight: 550 g (lamp 140 g on the head + battery case 410 g)

DUO® LED 14

Hybrid waterproof headlamp: halogen/14 LEDs with three CONSTANT LIGHTING modes

• All-terrain, rugged, headlamp that is waterproof to -5 meters
• Two powerful light sources to choose from, depending on the activity:
- halogen light for long-range, focused lighting
- 14 LEDs for flood beam proximity lighting, with 3 lighting modes (maximum, optimum, economic)
• Proximity lighting with CONSTANT LIGHTING technology for long battery life:
- 14 LEDs for a constant level of lighting until the batteries are almost discharged
- switches to reserve power mode when batteries are almost completely discharged
• Comfortable and easy to use:
- adjustable and comfortable elastic headband
- on/off switch can be locked to prevent accidental operation
- light body can be tilted
• Spare halogen bulb in the light body of the headlamp
• Waterproof down to -5 meters: IP X8
• Certification(s): CE
• 3-year guarantee

• Available in four versions:
- DUO LED 14 (**E72 P**):
operates on four AA/ LR6 batteries (included), or with optional ACCU DUO rechargeable battery pack (E65100 2). Weight: 300 g including batteries
- FIXO DUO LED 14 (**E63 L14**):
mounted on helmet, operates on four AA/ LR6 batteries (included), or with optional ACCU DUO rechargeable battery pack (E65100 2) Weight: 180 g including batteries
- DUOBELT LED 14 (**E76 P**):
remote battery pack can be worn on the belt, reducing the weight carried on the head, operates on four C/LR14 batteries (included). Weight: 550 g (lamp 140 g on the head + battery case 410 g)
- VERTEX BEST DUO LED 14 (**A10BWE**):
comfortable helmet with integrated hybrid lighting, see page 67

DUO® LED 14
ACCU E72 AC

Hybrid waterproof headlamp: halogen/14 LEDs with 3 CONSTANT LIGHTING modes with rechargeable battery and battery pack

• Version of the DUO LED 14 with rechargeable battery:
- large capacity rechargeable battery
- charges quickly
• All-terrain, rugged, headlamp that is waterproof to -5 meters
• Two powerful light sources to choose from, depending on the activity:
- halogen light for long-range, focused lighting
- 14 LEDs for flood beam proximity lighting, with 3 lighting modes (maximum, optimum, economic)
• Proximity lighting with CONSTANT LIGHTING technology for long battery life:
- 14 LEDs for a constant level of lighting until the rechargeable battery is almost discharged
- switches to reserve power mode when the rechargeable battery is almost discharged
• Comfortable and easy to use:
- adjustable and comfortable elastic headband
- on/off switch can be locked to prevent accidental operation
- light body can be tilted
• Spare halogen bulb in the light body of the headlamp
• ACCU DUO rechargeable battery + quick charger (**E65 2**) included:
- Ni-MH 2700 mAh rechargeable battery (four elements)
- maximum number of charges: approximately 500
- recharge time: approximately 4 hours (with end-of-charge indicator light)
- 110/240 V compatible quick charger
• Waterproof down to -5 meters: IP X8
• Weight: 380 g including rechargeable battery
• Certification(s): CE
• 3-year guarantee

ACCU DUO ATEX

DUO wall charger

Bulb/LED

ACCU DUO

12 V DUO car charger

CROCHLAMP S

ACCU DUO + EUR/US charger

MODU'LED 14 DUO

CROCHLAMP L

ACCU DUO® ATEX E61100 2

Large capacity rechargeable battery for DUO ATEX

• Rechargeable battery for explosive environments minimizes the risk of an electric arc or overheating
• Ni-MH large capacity rechargeable battery:
- 2700 mAh (four elements)
- maximum number of charges: approximately 500
• Certification(s):
- ATEX: Ex II 2 GD, Ex ia IIB T3, Ex ia D21 T200°C
- CE EN 50014, EN 50020
- CEI 61241-0, CEI 61241-11
• 3-year guarantee

ACCU DUO® E65100 2

Large capacity rechargeable battery for the DUO LED 5 and DUO LED 14

• Ni-MH large capacity rechargeable battery:
- 2700 mAh (four elements)
- maximum number of charges: approximately 500
• 3-year guarantee

ACCU DUO® + EUR/US charger E65 2

Large capacity rechargeable battery for DUO LED 5 and DUO LED 14 with quick charger

• Ni-MH large capacity rechargeable battery:
- 2700 mAh (four elements)
- maximum number of charges: approximately 500
• 110/240 V compatible quick charger:
- recharge time: approximately 4 hours (with charge and end-of-charge indicator light)
- comes with interchangeable standard European and North American wall charger
• 3-year guarantee

DUO wall charger E65200 2

Quick charger for ACCU DUO

• 110/240 V compatible quick charger:
- recharge time: approximately 4 hours (with charge and end-of-charge indicator light)
- comes with interchangeable standard European and North American wall charger
• 3-year guarantee

12 V car charger for DUO E65300 2

ACCU DUO car charger

• 3-year guarantee

MODU'LED 14 DUO® E60970

Hybrid reflector + 14 LED module with three constant lighting modes

• Replaces the 2-pin bulb or the MODU'LED on DUO and DUOBELT headlamps
• Regulated fourteen LED lighting with reserve power mode
• Weight: 8 g
• CE
• 3-year guarantee

DUO halogen bulb FR0500 BLI

6 V halogen bulb

DUO ATEX 1 W LED E61700 2

1 W LED with cap

CROCHLAMP S E04350

Headlamp clips for thin-edged helmets

• Allows a headlamp to be installed on a helmet that lacks integrated headlamp clips

CROCHLAMP L E04405

Headlamp clips for thick-edged helmets

• Allows a headlamp to be installed on a helmet that lacks integrated headlamp clips

HEADLAMPS
COMPACT AND RUGGED

HEADLAMPS
VERSATILE

HEADLAMPS
HIGH PERFORMANCE

EMERGENCY HEADLAMP

	Lighting technology	Light source	Beam pattern	Lighting mode	Distance				Battery life	Maximum light quantity
					t = 0	t = 0 h 30	t = 10 h	t = 30 h		
DUO ATEX LED 5	CONSTANT LIGHTING	1 W LED	Focused	-	50 m --> 10 h 30				10 h 30	30 lumens
	CONSTANT LIGHTING	5 LEDs	Wide	-	22 m --> 13 h				13 h	-
DUO LED 5	STANDARD LIGHTING	Halogen	Focused	-	100 m	70 m	0 m	0 m	4 h	40 lumens
	STANDARD LIGHTING	5 LEDs	Wide	-	28 m	24 m	20 m	10 m	65 h	40 lumens
	STANDARD LIGHTING	Halogen (with ACCU DUO)	Focused	-	100 m	75 m	0 m	0 m	5 h 30	40 lumens
	CONSTANT LIGHTING	5 LEDs (with ACCU DUO)	Wide	-	24 m --> 12 h				12 h	40 lumens
DUO LED 14 VERTEX BEST DUO LED 14 FIXO DUO LED 14	STANDARD LIGHTING	Halogen	Focused	-	100 m	70 m	0 m	0 m	4 h	36 lumens
	CONSTANT LIGHTING	14 LEDs	Wide	Optimum	26 m --> 10 h				10 h	13 lumens
	CONSTANT LIGHTING			Maximum	34 m --> 3 h 30				3 h 30	67 lumens
	CONSTANT LIGHTING			Economic	15 m --> 63 h				63 h	43 lumens
DUO LED 14 ACCU	STANDARD LIGHTING	Halogen	Focused	-	100 m	75 m	0 m	0 m	5 h 30	36 lumens
	CONSTANT LIGHTING	14 LEDs	Wide	Optimum	26 m --> 17 h				17 h	13 lumens
	CONSTANT LIGHTING			Maximum	34 m --> 5 h				5 h	67 lumens
	CONSTANT LIGHTING			Economic	15 m --> 70 h				70 h	43 lumens
DUOBELT LED 5	STANDARD LIGHTING	Halogen	Focused	-	100 m	80 m	35 m	0 m	11 h 30	30 lumens
	STANDARD LIGHTING	5 LEDs	Wide	-	28 m	24 m	22 m	19 m	350 h	40 lumens
DUOBELT LED 14	STANDARD LIGHTING	Halogen	Focused	-	100 m	80 m	35 m	0 m	11 h 30	32 lumens
	CONSTANT LIGHTING	14 LEDs	Wide	Optimum	26 m --> 35 h				35 h	13 lumens
	CONSTANT LIGHTING			Maximum	34 m --> 9 h 30				09 h 30	67 lumens
	CONSTANT LIGHTING			Economic	15 m --> 210 h				210 h	43 lumens

The lighting performance is likely to evolve, don't hesitate to consult petzl.com.
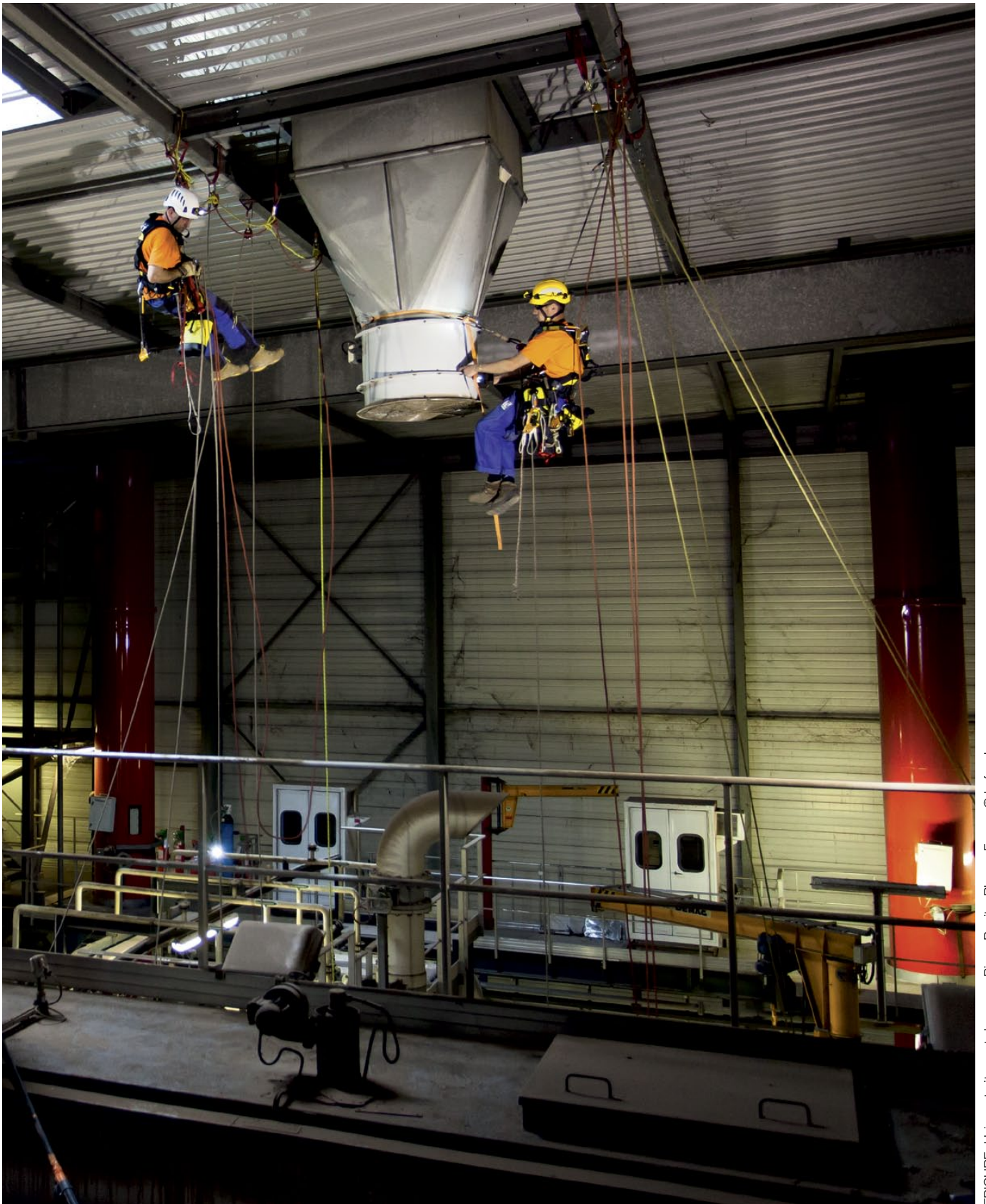
LIGHTING

EPICURE, Usine retraitement des eaux, Pierre Benite, Rhone, France © Lafouche

The ULTRA VARIO and ULTRA VARIO BELT headlamps were created for the most demanding activities. They are designed to offer powerful lighting and great versatility. These lamps have an exceptional weight to power ratio. The two versions allow the user to optimally reduce bulk (ULTRA VARIO) or weight carried on the head (ULTRA VARIO BELT), depending on need.
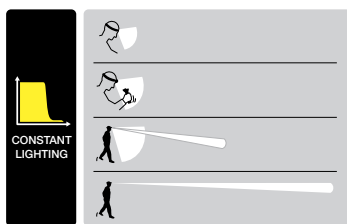
Versatile use

Four lighting modes designed to address multiple situations encountered in the field.

Rotating selector knob

Rotating selector knob is easy to use, even with gloves, allowing quick access to the different modes.

Performance lighting

The latest generations of LEDs deliver highly advanced lighting performance.

Lithium-Ion rechargeable battery

Lithium-Ion technology provides powerful, regulated lighting and limits the weight of the headlamp.

Two ways to wear them

The ULTRA VARIO and ULTRA VARIO BELT headlamps can be:
- worn directly on the head with the elastic band
- mounted without an elastic band on the Petzl VERTEX or ALVEO helmets (with the included mounting plate)

HEADLAMPS
COMPACT AND RUGGED

HEADLAMPS
VERSATILE

HEADLAMPS
HIGH PERFORMANCE

EMERGENCY HEADLAMP

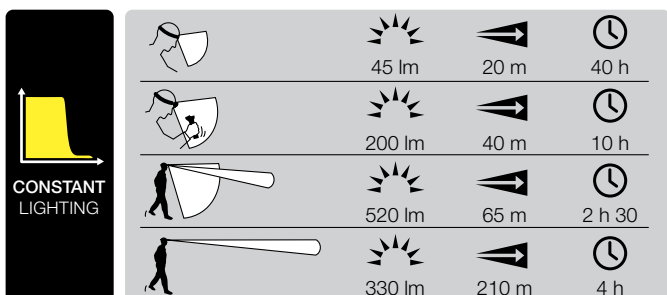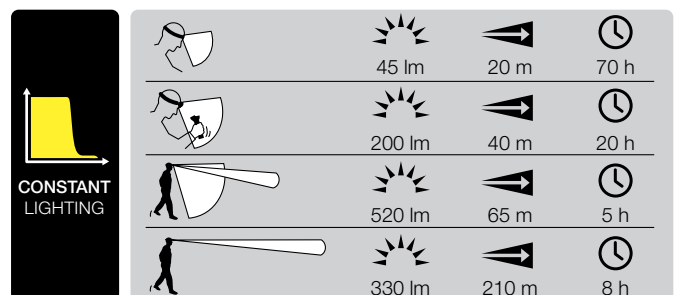## ULTRA VARIO® E54 H

Ultra-powerful multi-beam headlamp with rechargeable battery

• Headlamp keeps the hands free for work: may be worn on the head with the headband, or mounted on a VERTEX (2011 version and later) or ALVEO helmet with removable plates (included)
• CONSTANT LIGHTING technology: guaranteed lighting performance that does not diminish during the entire rated battery life. Switches to reserve lighting when rechargeable battery is almost discharged: lights to 43 lumens for a minimum of 1 hour
• Four modes adapt lighting to the activity:
- low intensity mode: wide beam with relatively low intensity favors a long battery life and prevents blinding others
- close-range work mode: wide beam with intensity adapted to comfortable close-range vision
- movement mode: mixed beam offers a focused component for easily moving around
- distance vision mode: highly focused beam for spotting (maximum range)
• Simple and comfortable to use:
Rotating selector knob is easy to use, even with gloves, allowing quick access to the different modes:
- quick connection system makes the battery easy to remove
- front and back comfort plates with adjustable elastic headband for an excellent fit on the head
• High-performance rechargeable battery:
- the optimal compromise between capacity and size, making it comfortable on the head
- 2600 mAh Lithium-Ion rechargeable battery offers excellent performance at low temperatures
- energy gauge allows monitoring of battery's charge level
- light flashes to signal switch to reserve lighting mode
- charger included; quick charge in 3 hours for frequent use
• Rugged:
- excellent resistance to falls, to impacts and to crushing
• Waterproof (to -1 m for 30 minutes) and dustproof (IP 67) No maintenance required after immersion
• Weight: 375 g (with ACCU 2 ULTRA)
• Certification(s): CE
• Guarantee:
- lamp: 3 years
- rechargeable battery: 1 year (or 500 charging cycles)

ULTRA VARIO® BELT E54 B

Ultra-powerful multi-beam headlamp with remote rechargeable battery pack

• Headlamp keeps the hands free for work: may be worn on the head with the headband, or mounted on a VERTEX (2011 version and later) or ALVEO helmet with removable plates (included)
• Very high capacity battery may be moved to the waistbelt (case and mount included) to minimize the weight carried on the head
• CONSTANT LIGHTING technology: guaranteed lighting performance that does not diminish during the entire rated battery life. Switches to reserve lighting when rechargeable battery is almost discharged: lights to 43 lumens minimum for 2 hours
• Four modes adapt lighting to the activity:
- low intensity mode: wide beam with relatively low intensity favors a long battery life and prevents blinding others
- close-range work mode: wide beam with intensity adapted to comfortable close-range vision
- movement mode: mixed beam offers a focused component for easily moving around
- distance vision mode: highly focused beam for spotting (maximum range)
• Simple and comfortable to use:
Rotating selector knob is easy to use, even with gloves, allowing quick access to the different modes:
- quick connection system makes the battery easy to remove
- front and back comfort plates with adjustable elastic headband for an excellent fit on the head
• High-capacity remote rechargeable battery pack:
- 5200 mAh Lithium-Ion rechargeable battery offers excellent performance at low temperatures
- energy gauge allows monitoring of battery's charge level
- light flashes to signal switch to reserve lighting mode
- charger included; quick charge in 5 hours for frequent use
• Rugged:
- excellent resistance to falls, to impacts and to crushing
- waterproof (to -1 m for 30 minutes) and dustproof (IP 67) No maintenance required after immersion
• Weight: lamp 230 g + ACCU 4 ULTRA 265 g
• Certification(s): CE
• Guarantee:
- lamp: 3 years
- rechargeable battery: 1 year (or 500 charging cycles)

CONSTANT LIGHTING

	lm	m	h
	45 lm	20 m	40 h
	200 lm	40 m	10 h
	520 lm	65 m	2 h 30
	330 lm	210 m	4 h

Reserve lighting: lights to 43 lumens for a minimum of 1 hour

CONSTANT LIGHTING

	lm	m	h
	45 lm	20 m	70 h
	200 lm	40 m	20 h
	520 lm	65 m	5 h
	330 lm	210 m	8 h

Reserve lighting: lights to 43 lumens minimum for 2 hours

ACCU 2 ULTRA   ACCU 4 ULTRA

ULTRA quick charger

ACCU 2 ULTRA E55450 2

Rechargeable battery for ULTRA VARIO or ULTRA VARIO BELT headlamps

• Lithium-Ion technology offers high capacity (2600 mAh) with reduced weight and excellent performance at low temperatures
• Energy gauge allows monitoring of battery's charge level
• Quick connection system for instant battery removal
• Charges with the wall charger included with ULTRA VARIO headlamps (complete charge in 3 hours)
• Number of charging cycles: approximately 500
• Waterproof (to -1 m for 30 minutes) and dustproof (IP 67) No maintenance required after immersion
• Weight: 145 g
• Certification(s): CE
• Guarantee: 1 year or 500 charging cycles

ACCU 4 ULTRA E55400 2

Very high capacity rechargeable battery for the ULTRA VARIO BELT headlamp

• Lithium-Ion technology offers high capacity (5200 mAh) with reduced weight and excellent performance at low temperatures
• Energy gauge allows monitoring of battery's charge level
• Quick connection system for instant battery removal
• Charges with the wall charger included with ULTRA VARIO BELT headlamps (complete charge in 5 hours)
• Number of charging cycles: approximately 500
• Waterproof (to -1 m for 30 minutes) and dustproof (IP 67) No maintenance required after immersion
• Weight: 265 g
• Certification(s): CE
• Guarantee: 1 year or 500 charging cycles

ULTRA quick charger E55800

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

• 100/240 V EUR/US compatible wall charger
• Recharge time:
- ACCU 2 ULTRA rechargeable battery: 3 hours
- ACCU 4 ULTRA rechargeable battery: 5 hours
• End-of-charge indicator light
• Comes with interchangeable European and North American standard wall charger
• Certification(s): CE
• 3-year guarantee

e+LITE E02 P3

Ultra-compact emergency headlamp

• Ultracompact, ultra-light (less than 5 cm long and only 27 g) emergency headlamp to always have with you
• Always ready to use, can be stored with batteries (lithium CR 2032) for 10 years
• White lighting (26 lumens up to 29 m) allows you to move around easily in the dark
• For emergency situations, the red LED allows you to be seen from a distance (300 m for 30 hours)
• Locking on/off switch designed to prevent accidental operation
• Resists extreme temperatures -30 °C to +60 °C
• Waterproof to -1 m for 30 minutes (IP 67)
• Certification(s): CE, ATEX (Ex II 3 GD Ex ic IIC T6, Ex tD A22, IP 68 T85 °C)
• Weight: 27 g
• 10-year guarantee

© Lafouche

Facilitating understanding of usage and situations. Sharing this knowledge with the community of professionals in vertical environments. Petzl's Solutions Department has two objectives.

Training modules

Each of the modules deals with a specific problem. They are based on experimentation in realistic, concrete situations. These training modules are grouped into three themes:
• Environmental Expertise modules focus on adapting behavior and usage of equipment to the specifics of certain vertical environments
• Product Expertise modules focus on product knowledge and skills development
• Solutions Expertise modules focus on analyzing the interactions related to product combinations used in the field

Examples of modules:
• basics of tree care on a rope
• periodic inspection of fall arrest PPE
• mobile fall-arrest device on a rope
• ...

A network for spreading and sharing knowledge

The Solutions Department manages a network for the dissemination of training modules on an international scale. Within this network, training centers with Petzl Technical Partner certification integrate these modules into their own training courses.

For more information on the Petzl Solutions network and these training modules available, contact the Petzl distributor in your country.

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The Petzl Custom Products department is a dedicated team that puts Petzl's expertise at your service to meet particular verticality and lighting needs, outside of the catalog.

Three types of services

• Product marking: printing, transfers, embroidery, laser marking, custom coloring... to customize your products
• Product adaptation: adapting a product to a specific use or need- options, particular sizes, functional modifications...
• Creation of a specific solution: studying, designing, and creating a new solution based on your specifications

For more information on the possibilities of Petzl Custom, contact the Petzl distributor in your country.

©Chris Blakeley

Fondation

Created in 2006, the Petzl Foundation supports public interest projects linked to the practice of vertical activities. Involvement in three main sectors:
- accident prevention and risk management education
- preserving the environment
- supporting scientific research

Improving safety for date palm growers in Algeria

The date palm is the base of agriculture in the Sahara, with more than 10 million palm trees farmed. In the oases, date palm growers cultivate palm trees for their dates. These workers at height practice a high-risk profession, presently without any real protection... How could falls be prevented? The Petzl Foundation is supporting the BEDE international union, to help design an appropriate solution.

Two goals at the Beni-Isguen palm grove near Ghardaïa in the center of Algeria were achieved between 2011 and 2012 in order to better understand the protection needs and come up with a solid technical solution that would be acceptable to the majority. Since then, Chris Blakeley, a trainer at Petzl, and Marc Séraphin, administrator of the Foundation, developed a technical solution with the help of Petzl's Custom Products department. This new equipment, a harness and two lanyards with rope clamps, will allow the worker at height to access the palm tree with a considerably lower risk than today. For Chris Blakeley, "this solution really brings a lot of benefits to these workers".

More to come from the field...

For more information on current projects,
visit www.petzl-foundation.org.

NEW 2014

From the deep: the Petzl adventure

A novel 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, and 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.

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