

# MANUAL

## PULLEY

XP21, XP22



CE 1019  
EN12278:2007

ELLER®  
SAFE

### NOTIFIED BODY FOR EU TYPE EXAMINATION AND PRODUCTION CONTROL:

VVUÚ a.s. (1019) Píkartská 1337/7, Ostrava-Radvanice, 716 07, Czech Republic

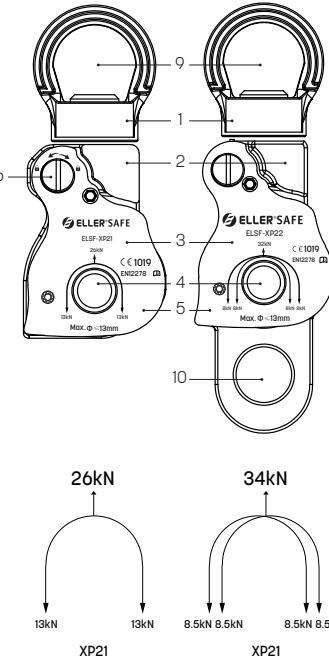
The use of XP21/XP22 Pulley is intended for mountaineering, climbing and related activities. This product meet European Standard EN12278:2007.

Pulleys with openable sideplates are not suitable for retrievable rigging.

Pulley can be opened while attached to the anchor.

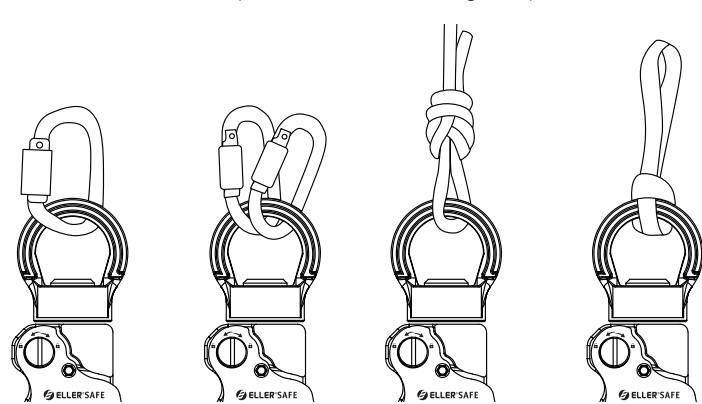
The attachment hole is compatible with carabiners, slings or ropes.

### MARKING & NOMENCLATURE OF PARTS



- ELLERsafe means brand name
- XP21/XP22 means model number;
- MM/YY: batch number: MONTH/YEAR
- EN12278:2007: means European standard and publication date
- CE means conform according to Regulation 2016/425;
- Max 13mm diameter rope

1. Swivel
  2. Frame
  3. Sheave
  4. Axle
  5. Moving side plate
  6. Unlocking button
  7. Cover
  8. Rivet
  9. Main attachment hole
  10. Auxiliary attachment hole (XP22)
- Materials: aluminum, stainless steel



**WARNING:** Prolonged use with a connector can create wear and sharp edges that are dangerous if the attachment hole is then used with a rope or a sling. Beware of any external object pressing against the unlocking button.

### BEFORE USE

The techniques employed in the proper and safe use of this equipment may only be learned through PERSONAL instruction received from an instructor who is well-qualified in all phases of vertical rope work. Such instruction will include an evaluation of your comprehension of, and ability to perform, the tasks required to safely and efficiently use this equipment.

Never attempt its use until you have received such instruction and are believed competent by your instructor.

### WARNING

Immediately retire the devices if:

- it fails to pass inspection,
- it has been subjected to a major fall or load,
- you do not know its full usage history, - it is non-conforming to updated norms, not suitable or compatible to the present techniques,
- you have any doubts as to its integrity. To prevent future use, destroy retired equipment.

When suspect that the product is no more safely and reliable, please contact the manufacturer or the distributor.

### MAINTENANCE AFTER USE

Carefully clean with clear water (no soap) and dry this pulley to remove all dirt or foreign material and moisture. Using soap to clean the pulley may reduce the life of bearings and bushings. Minor sharp edges may be smoothed with a fine abrasive cloth, before cleaning. No lubrication is required. Do Not Disassemble. Store in a clean, dry place.

### REMOVAL FROM SERVICE

This pulley should be removed from service if it has been dropped, or exposed to heat sufficient to alter its surface appearance, or if distortion of any part is apparent, if any cracks are apparent, if it has scratches or gouges of more than a superficial nature, or the pulley has been disassembled. If history of the pulley is unknown or if based on the history of the use of this pulley there is any doubt regarding the safety of this pulley, it should be removed from service. You should destroy retired gear to prevent future use.

### LIFESPAN

The service life of pulleys is largely dependent on the type of use and the environment used in.

Under moderate use, with limited exposure to moisture, salt water, corrosive agents, excessive loads, shock loading and excessive wear, pulleys may last many years. However, many events such as taking a large dynamic load, dropping, or other events which cause physical damage, can reduce the lifespan of this pulley dramatically.

You must inspect your pulley frequently and take personal responsibility for evaluating its condition and retiring unsafe gear. Inspection is extremely important, but visual inspection only will not assure that damage has not occurred.

### WARNING

This product is for climbing and mountaineering only. Climbing and mountaineering are dangerous. Understand and accept the risks involved before participating. Minors and others not able to assume this responsibility must be under the direct control of an experienced and responsible person. You are responsible for your own actions and decisions. Before using this product, read and understand all instructions and warnings that accompany it and familiarize yourself with its proper use, capabilities and limitations. Seek qualified instruction. Do not modify this product in any way. Failure to read and follow these warnings can result in severe injury or death!

### INSPECTION

Pulleys must be visually and manually inspected before and after each use to verify that the device is operating correctly. Any product which has been withdrawn from service must be inspected by a competent person and may only be returned to service if said competent person authorizes in writing the use of that product. Where any product fails an inspection or has seen the force of a fall, it is to be immediately taken out of service and tagged unusable. Such products must be certified by the manufacturer or their representative prior to re-instatement to service.

During the user inspection you must inspect:

- The sheave rotates freely in the assembly;
- Ensure there is no dirt build up in the area of the sheave and pulley cheeks;
- There is no deformation of the pulley cheeks;
- There is no corrosion of the metal components;
- There are no cracks or breaks in the body of the pulley;
- The side plate(s) close and lock;
- The swivel rotates freely.

### INSTALLATION:

**Opening:** Press sideplate button, open the sideplate and install the rope.  
**Closing:** Close the sideplate and make sure the button locks.  
Double pulleys are not to be used with a single rope, both sides/sheaves should be used at the same time to prevent cross loading and abrasion on the ropes.

## PERIODIC INSPECTIONS

Device must be inspected at least once every 12 months from the date of first use. Periodic inspections must only be carried out by a competent person who has the knowledge and training required for personal protective equipment periodic inspections. Depending upon the type and environment of work, inspections may be needed to be carried out more frequently than once every 12 months. Every periodic inspection must be recorded in the Identity Card of the equipment.

#### MAXIMUM LIFESPAN OF THE EQUIPMENT

The maximum lifespan of load bearing textile equipment is 10 years from the date of manufacture.

Metallic equipment can be used without time limit on the condition periodic inspections are carried out timely.

The equipment maximum lifetime depends on the intensity of usage and the environment of usage. Using the device in rough environment, marine environment, contact with sharp edges, exposure to extreme temperatures or aggressive substances, etc. can lead to the withdrawal from use even after one use.

## WITHDRAWAL FROM USE

The device must be withdrawn from use immediately and destroyed when it has been used to arrest a fall or it fails to pass inspection or there are any doubt as to its reliability.

## THE ESSENTIAL PRINCIPLES FOR USERS OF PERSONAL PROTECTIVE EQUIPMENT AGAINST FALLS FROM A HEIGHT

- personal protective equipment shall only be used by a person trained and competent in its safe use.
  - personal protective equipment must not be used by a person with medical condition that could affect the safety of the equipment user in normal and emergency use.
  - a rescue plan shall be in place to deal with any emergencies that could arise during the work.
  - being suspended in PPE (e.g. arresting a fall), beware of suspension trauma symptoms. To avoid symptoms of suspension trauma, be sure that the proper rescue plan is ready for use. It is recommended to use trauma straps.
  - it is forbidden to make any alterations or additions to the equipment without the manufacturer's prior written consent.
  - any repair shall only be carried out by a competent person.
  - cable, wires, clips, tenons, loops, trimmable, connectors, adjusting elements;
  - in retractable fall arresters - cable or webbing, retractor and brake proper acting, casing, energy absorber, connector;
  - in guided type fall arresters - body of the fall arrester, sliding function, locking gear acting, rivets and screws, connector, energy absorber;
  - in metallic components (connectors, hooks, anchors)
  - main body, rivets, gate, locking gear acting.
  - after every 12 months of utilization, personal protective equipment must be withdrawn from use to carry out periodical detailed inspection. The periodical inspection must be carried out by a competent person for periodic inspection. The periodical inspection can be carried out

equipment manufacturer or his certified representative.

- personal protective equipment shall not be used outside its limitations, or for any purpose other than that for which it is intended.
  - personal protective equipment should be a personal issue item.
  - before use ensure about the compatibility of items of equipment assembled into a fall arrest system.
  - Periodically check connecting and adjusting of the equipment components to avoid accidental loosening or disconnecting of the components
  - it is forbidden to use combinations of items of equipment in which the safe function of any one item is affected by or interferes with the safe function of another.
  - before each use of personal protective equipment it is obligatory to carry out a pre-use check of the equipment, to ensure that it is in a serviceable condition and operates correctly before it is used.
  - during pre-use check it is necessary to inspect all elements of the equipment in respect of any damages, excessive wear, corrosion, abrasion, cutting or incorrect acting, especially take into consideration: in full body harnesses and belts buckles, adjusting elements, attaching points, webbings, seams, loops;
    - in energy absorbers - attaching loops, webbing, seams, casing, connectors;
    - in textile lanyards or lifelines or guidelines - rope, loops, thimbles, connectors, adjusting element, splices;
    - in steel lanyards or lifelines or guidelines - cable, wires, clips, ferrules, loops, thimbles, connectors, adjusting elements;
    - in retractable fall arresters - cable or webbing, retractor and brake proper acting, casing, energy absorber, connector;
    - in guided type fall arresters - body of the fall arrester, sliding function, locking gear acting, rivets and screws, connector, energy absorber;
    - in metallic components (connectors, hooks, anchors)
    - main body, rivets, gate, locking gear acting.
  - after every 12 months of utilization, personal protective equipment must be withdrawn from use to carry out periodical detailed inspection. The periodic inspection must be carried out by a competent person for periodic inspection. The periodic inspection can be carried out

also by the manufacturer or his authorized representative.

- in case of some types of the complex equipment e.g. some types of retractable fall arresters the annual inspection can be carried out only by the manufacturer or his authorized representative.
  - regular periodic inspections are the essential for equipment maintenance and the safety of the users which depends upon the continued efficiency and durability of the equipment.
  - during periodic inspection it is necessary to check the legibility of the equipment marking. Don't use the equipment with illegible marking.
  - it is essential for the safety of the user that if the product is re-sold outside the original country of destination the reseller shall provide instructions for use, for maintenance, for periodic examination and for repair in language of the country in which the product is to be used.
  - personal protective equipment must be withdrawn from use immediately when any doubt arises about its condition for safe use and not used again until confirmed in writing by equipment manufacturer or his representative after carried out the detailed inspection.
  - personal protective equipment must be withdrawn from use immediately and destroyed (or another procedures shall be introduced according detailed instruction from equipment manual) when it has been used to arrest a fall.
  - a full body harness (conforming to EN 361) is the only acceptable body holding device that can be used, in a fall arrest system.
  - in full body harness use only attachment points marked with a capital letter "A" to attach a fall arrest system.
  - the anchor device or anchor point for the fall arrest system should always be positioned, and the work carried out in such a way, as to minimise both the potential for falls and potential fall distance. The anchor device/point should be placed above the position of the user. The shape and construction of the anchor device/point shall not allow to self-acting disconnection of the equipment. Minimal static strength of the anchor device/point is 12 kN. It is recommended to use certified and marked structural anchor point complied with EN795.
  - it is obligatory to verify the free space required beneath the user at the workplace before each occasion of use the fall arrest system, so that, in the case of a fall, there will be no collision with the ground or other obstacle in the fall used equipment.
  - there are many hazards that may affect the performance of the equipment and corresponding safety precautions that have to be observed during equipment utilization, especially:
    - trailing or looping of lanyards or lifelines over sharp edges, - any defects like cutting, abrasion, corrosion, - climatic exposure, - pendulum falls, - extremes of temperature, - chemical reagents, - electrical conductivity.
  - personal protective equipment must be transported in the package (e.g.: bag made of moisture-proof textile or foil bag or cases made of steel or plastic) to protect it against damage or moisture.
  - the equipment can be cleaned without causing adverse effect on the materials in the manufacture of the equipment. For textile products use mild detergents for delicate fabrics, wash by hand or in a machine and rinse in water. For energy absorbers use only a damp cloth to wipe away dirt. It's forbidden to immerse energy absorbers into the water. Plastic parts can be cleaned only with water. When the equipment becomes wet, either from being in use or when due cleaning, it shall be allowed to dry naturally, and shall be kept away from direct heat. In metallic products some mechanic parts (spring, pin, hinge, etc.) can be regularly slightly lubricated to ensure better operation.
  - personal protective equipment should be stored loosely packed, in a well-ventilated place, protected from direct light, ultraviolet degradation, damp environment, sharp edges, extreme temperatures and corrosive or aggressive substances.
  - Using the harness in connection with personal protective equipment against falls from a height must be compatible with manual instructions of this equipment and obligatory standards:
    - EN353-1, EN353-2, EN355, EN354, EN360
    - for the fall arrest systems;
    - EN362 - for the connectors;
    - EN1496, EN341 - for rescue devices;
    - EN795 - for anchor devices.

## MANUFACTURER

Louis Reyners,  
Symon Spiersweg 13-A  
1506 RZ Zaandam  
T:+31(0)756504750  
E: info@lr.nl

## CHECK CARD

It is the responsibility of the user to provide the identity card and to fill in the details required. The identity card should be filled in before the first use by a competent person, responsible in the user organization for protective equipment. Any information about the equipment like periodic inspections, repairs, reasons of equipment's withdrawal from use shall be noted into the identity card. The identity card should be stored during a whole period of equipment utilization. Do not use the equipment without the identity card.

Model and type of equipment	
Serial/batch number	
Reference number	
Date of manufacture	
Date of Purchase	
Date of First use	
User name	

## PERIODIC INSPECTION AND HISTORY CARD