

- a full body harness complied with EN 361 is the only acceptable body holding device that can be used in 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 allowed 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 path. The required value of the free space should be taken from instruction manual of 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. Plastic parts can be cleaned only with water. When the equipment gets wet, either from being in use or during cleaning, it shall be allowed to dry naturally, and should 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.

Other maintenance and cleaning procedures should be adhered to detailed instructions stated in the manual of the equipment.

- 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.

IT IS THE RESPONSIBILITY OF THE USER ORGANISATION 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 WITHDRAWN FROM USE SHALL BE NOTED INTO THE IDENTITY CARD BY A COMPETENT PERSON.

THE IDENTITY CARD SHOULD BE STORED DURING A WHOLE PERIOD OF EQUIPMENT UTILIZATION.

DO NOT USE THE EQUIPMENT WITHOUT THE IDENTITY CARD.

ALL RECORDS IN THE IDENTITY CARD CAN BE FILLED IN ONLY BY A COMPETENT PERSON.

IDENTITY CARD

MODEL AND TYPE OF EQUIPMENT					
REF. NUMBER					
SERIAL NUMBER		DATE OF MANUF.			
USER NAME					
DATE OF PURCHASE		DATE OF PUTTING INTO OPERATION			
PERIODIC EXAMINATION AND REPAIR HISTORY					
	DATE	REASON FOR ENTRY PERIODIC EXAMINATION OR REPAIR	DEFECTS NOTED, REPAIRS CARRIED OUT AND OTHER RELEVANT INFORMATIONS	NAME AND SIGNATURE OF COMPETENT PERSON	PERIODIC EXAMINATION NEXT DUE DATE

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Instruction Manual

READ CAREFULLY BEFORE USE THE EQUIPMENT

CE 0082 EN 12278 Ref.: TU 430 / TU431

PROTEKT

PULLEY TU430 TU431

WARNING: Any activities at height are considered dangerous and may result in serious injuries or even death. The person using this equipment is responsible for any possible damage or consequences of an accident.

1. Definitions

WLL – Working Load Limit

MBS – Minimum Breaking Strength

DF – Design Factor

2. Basic parameters of the device

KIND OF PULLEY	TU430	TU431
Max. diameter of rope	Ø15 mm	Ø15 mm
Material	aluminium/stainless steel	aluminium/stainless steel
Working Load Limit	30 kN (15kN + 15kN)	30 kN (15kN + 15kN)
Minimum Breaking Strength	6 kN	6 kN
Safety Factor	1:5	1:5
Weight of the set (without the lanyard)	257 g	470 g

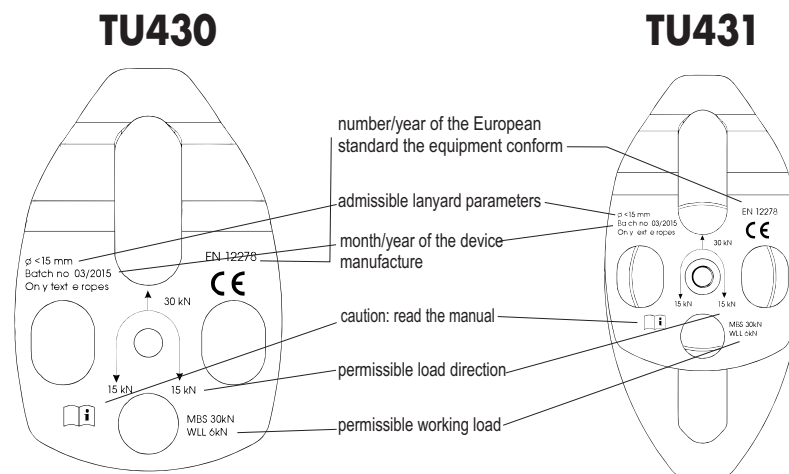
Pulley block is made of two plates, a fixed and a mobile, forming the pulley body. Between the plates, there is bearing-mounted rope roller with slide bearing providing a free roller rotation, even under a full load (WLL), and above that value.

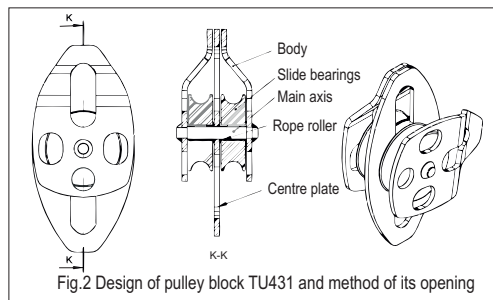
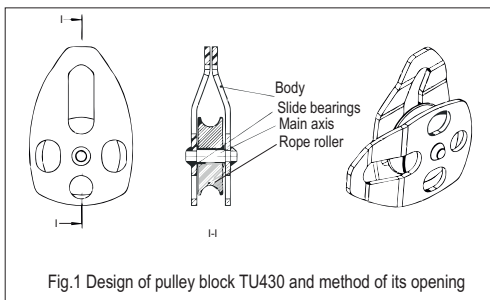
One of the pulley block's side can be rotated freely, allowing for installation of the rope on the pulley.

The body and the main roller are made of aluminium, while the main axis of stainless steel; the bearing consists of brass bearing shells. Use of aluminium alloys in essential parts allows for weight savings in the device as a whole.

Pulley blocks are available in colours intended to improve their visibility when operating in dark and dense forest areas.

MARKING





Load limits

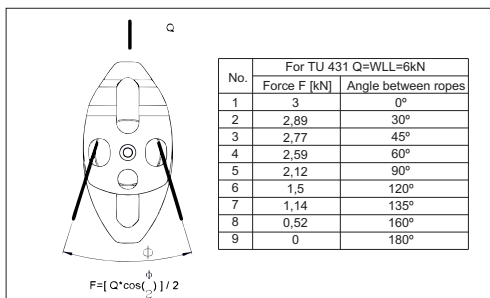
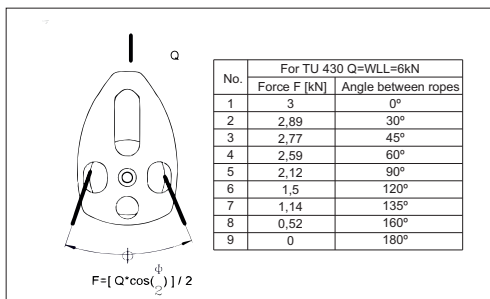


Fig.3 Example distribution of forces on pulley block at maximum work load depending on rope wrapping angle

Setting-up sheave systems

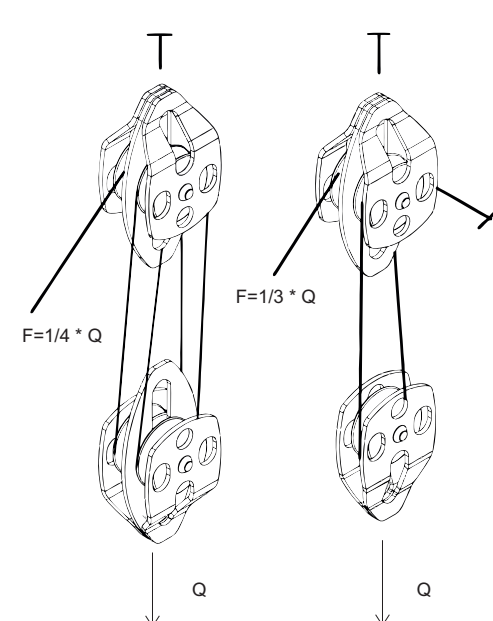


Fig.4 Example distribution of forces on pulley block at maximum work load depending on rope wrapping angle

BASIC PRINCIPLES OF USE AND GENERAL SAFETY RULES

Devices can be used mainly for working on heights, tree climbing and load transportation.

Devices designed for lifting and lowering of goods are subject to Directive 89/686/EEC and EN 12278:2007 standard

The device conforms with parameters given in the above table. Do not exceed loads as recommended by the manufacturer, and in case of any doubts please contact the manufacturer or your distributor.

This product is intended for use in normal weather conditions (-40°C - +50°C).

Work in damp conditions and when icing is present can lead to the reduction in device's strength and load capacity. For operation in aggressive environments, please contact the manufacturer or your distributor.

Avoid any contact of the device with corrosive substances and chemical reagents.

INSPECTION

Inspection of the device is necessary to maintain the proper state of repair of the equipment and to ensure user safety, which depends on continuous efficiency and durability of the device.

Prior to any use of the pulley, it is necessary to:

- Inspect all elements of the device in terms of any damage (mechanical, chemical and thermal), excessive wear, corrosion, cuts, wear, incorrect operation.

- Check connections between elements to avoid accidental loosening or disconnection of elements.

In case any irregularities are found the device should be withdrawn from use.

TIME OF USE

Maximum time of use of the devices is indefinite.

It is recommended to use the device for 5 years from the date of manufacture engraved on its housing.

STORAGE

Pulleys should be stored dry and clean, away from any chemical factors,

The device should be stored without any load suspended,

Remove any dust, water and contamination with a potential of damaging anti-corrosion layer during the device storage.

LUBRICATION

The device is fitted with plastic slide bearings that require no lubrication. If rolling resistance on the main roller increases, blow out the pulley with compressed air and inject small quantity of a lubricant, e.g. WD40 in between the roller and the body.

MAINTENANCE

Rope pulleys are maintenance-free, except for possible lubrication as indicated above. The manufacturer provides no spare parts for this products, and performs no repairs of the device. If a pulley is damaged, take it out of service and replace with a new one.

SHIPMENT

The device should be shipped in packaging (e.g. in a bag resistant to moisture or plastic bag or in crates made of steel or plastic), to protect it against damage and moisture.

THE ESSENTIAL PRINCIPLES FOR USERS OF PERSONAL PROTECTIVE EQUIPMENT

- 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.
- 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 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 guidelins - 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 connectors - 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.
- 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 arise 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 when it have been used to arrest a fall.
- a full body harness complied with EN 361 is the only acceptable body holding device that can be used in 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 minimize 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 allowed to self-acting disconnection of the equipment. Minimal static strength of the anchor device/point is 10 kN. It is recommended to use certified and marked structural anchor point complied with EN795.