

- 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 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- after every 12 months of utilization, personal protective equipment must be withdrawn from use to carry out periodical detailed inspection.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.
- 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 attaching points marked with big 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 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 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.
 

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.

## IDENTITY CARD

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.

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 INSPECTION OR REPAIR	DEFECTS NOTED, REPAIRS CARRIED OUT AND OTHER REVELANT INFORMATIONS	NAME AND SIGNATURE OF COMPETENT PERSON	PERIODIC EXAMINATION NEXT DUE DATE

Notified body, at which the European certification was issued and which supervises the production of the equipment:  
 APAYE SUDEUROPE SAS - 8 rue Jean-Jacques Vernazza - CS-60193 - 13322 MARSEILLE Cedex 16, France - No. 0082  
 PRODUCENT: PROTEKT, 93-403 LODZ, ul. Starorudzka 9, POLAND,  
 TEL: (48 42) 680 20 83, FAX: (48 42) 680 20 93, www.protekt.com.pl

## Instruction Manual



READ CAREFULLY BEFORE USE THE EQUIPMENT

CE 0082

EN 353-2:2002

+ VG11 11.075

### DEVICE DESCRIPTION

AC010 is a guided type fall arrester device on flexible guide that is a part of personal protective equipment against falls from a height. The device is compliant with EN 353-2. AC 010 can be used only with polyester guides (working ropes) of 14 mm diameter designated with AC 100 reference number. AC010 can be used to protect a single user only.

The guided type fall arrester including flexible anchorage line AC010 has been successfully tested according to VG11 11.075 requirements (which are outside of CE regulations) for horizontal use and a resulting simulated fall over an edge.

A steel bar with a radius of  $r = 0.5$  mm with no burs was used in these tests. On the basis of this test, the equipment is suitable for use over similar edges such as rolled steel profiles, wooden beams or a clad, rounded proof parapet.

### MARKINGS



Arrow indicating correct positioning of the rope grab on the guide (working rope)

GUIDED TYPE FALL ARRESTER — Type of device

AC 010 — Fall arrester reference number

CE 0082 — CE marking and number of the notified body controlling manufacturing of the equipment (art. 11)

EN 353-2:2002 — Number and year of the European Standard, the device is compliant with.

Manufacture date: MM.RRRR — month and year of manufacture

Serial number: XXXXXXXX — Serial number of the device



Caution! Read the manual before use

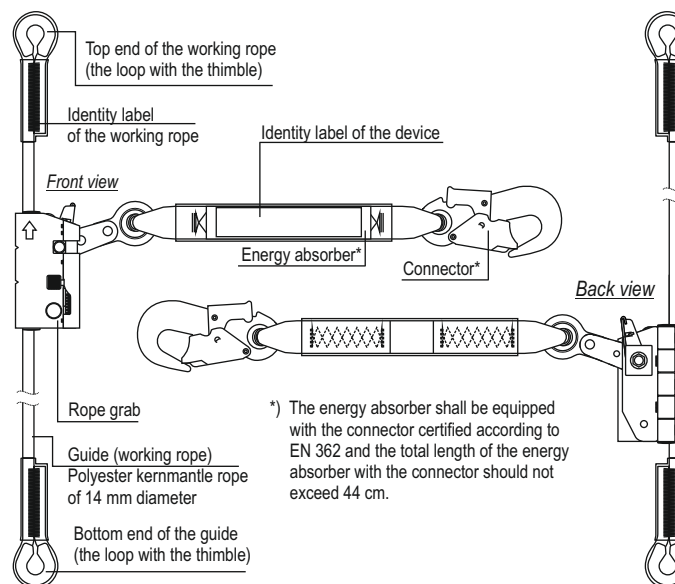
## GUIDED TYPE FALL ARRESTER ON FLEXIBLE GUIDE

Fall arrester ref. number: AC 010

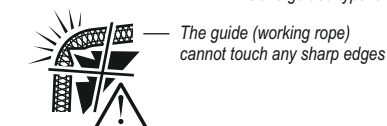
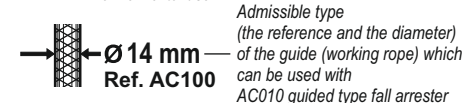
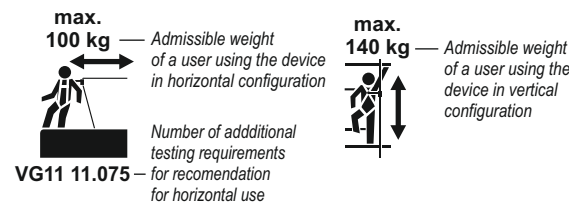
Guide ref. number:  
AC 100 xx  
(xx – length code of guide in meters)



AC010



\*) The energy absorber shall be equipped with the connector certified according to EN 362 and the total length of the energy absorber with the connector should not exceed 44 cm.



Designation of the device manufacturer or distributor



## PERIODIC INSPECTIONS

The 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.

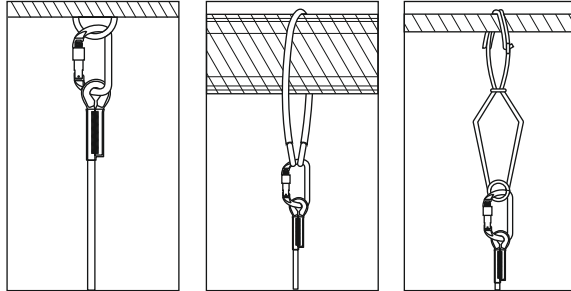
## MAXIMUM LIFESPAN OF THE EQUIPMENT

The maximum lifespan of the device is 10 years from the date of manufacture. 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.

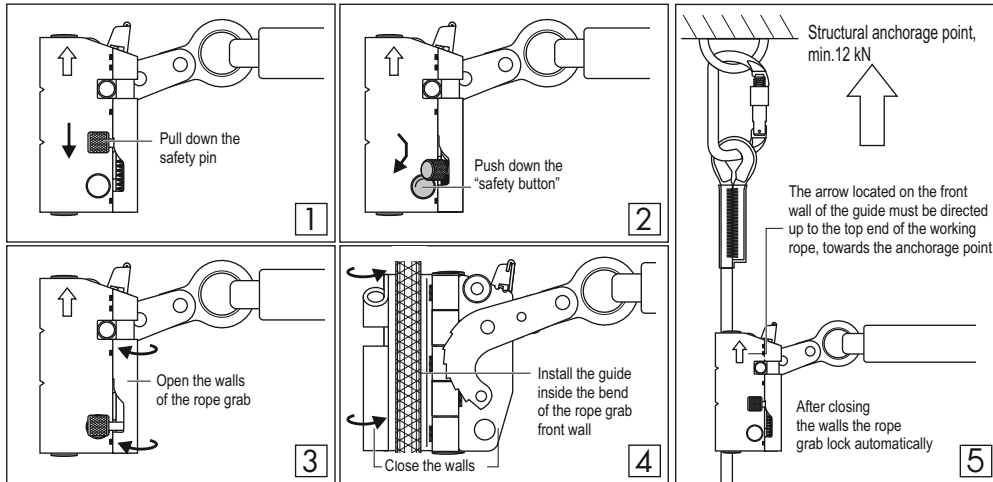
**ATTENTION:** The lifetime of the device depends on the intensity of usage and the environment of use. Using the device in rough environment, marine environment, contact with sharp edges, exposure to extreme temperatures or aggressive substances, etc. can lead to the withdrawal from use even after one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

## CONNECTING OF THE WORKING ROPE TO STRUCTURAL ANCHORAGE POINT

The guide (working rope) is to be connected to the structural anchorage point by means of the connector or anchoring device compliant with EN362 or EN795 standard. The structural anchorage point should have static resistance of min. 12 kN. The shape and design of the structural anchor point should not let self-acting disconnection of the guide. It is recommended to use certified and approved anchorage points conforming to EN795.

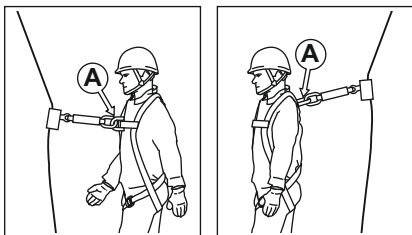


## INSTALLING THE ROPE GRAB ON THE WORKING ROPE



## CONNECTING THE DEVICE TO THE FULL BODY HARNESS

The connector of the rope grab must be connected to front or back attaching point of full body harness, designated with the capital "A" letter. The full body harness must comply with EN361 standard.



**ATTENTION:** Every time before using the equipment protecting against falls from height that employs the AC010 one needs to check if all the components are properly interconnected to one another and cooperate smoothly, as well as if they are compliant with compulsory standards:

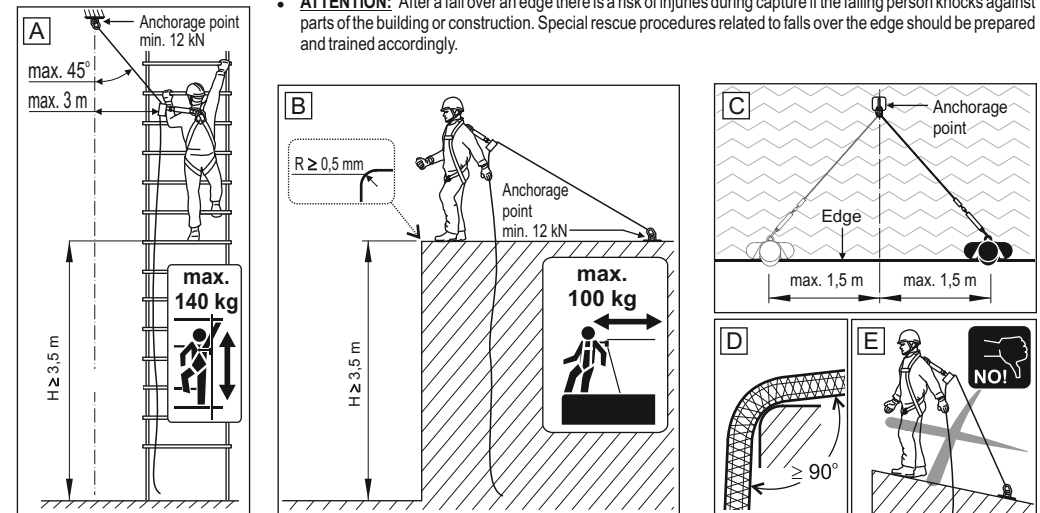
- EN 361 – for full body harness;
- EN 362 – for connectors;
- EN 795 – for anchoring devices;

**ATTENTION:** While ascending and descending over the first 2 meters above the reference level the user might not be properly secured against hitting the ground while falling, thus special care must be taken while working in this range of heights.

## MAIN RULES WHILE WORKING WITH THE AC010 DEVICE

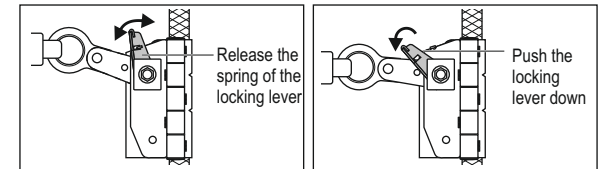
- The required free space "H" of minimum 3.5 m must be present underneath the user in order to safely arrest the fall. If the guide (working rope) of the length greater than 20 m is used, the free space underneath the user should be increased by 5% of the guide length.
- If the guide is attached to the anchor point situated in the vertical line directly over the user, the maximum admissible deflection of the working rope with respect to the vertical line equals 45° while the user moves horizontally with respect to structural anchor point. In order to prevent danger of pendulum type falls, the distance between the rope grab mechanism and the imaginary vertical line must not exceed 3 meters. The maximum total weight of the user protected with the AC010 device, attached to the anchorage point situated in the vertical line directly over the user must not exceed 140 kg. See picture A.
- The device was tested according to VG11 11.075 and it can be used while the user moves horizontally in places where fall over the edge is possible (e.g. on flat roofs). The minimum edge radius must be equal to 0.5 mm (Picture D). If the edge is sharp or it imposes high risk of rope damage, e.g. there are burrs, appropriate edge protection should be used. The guide (working rope) anchorage point cannot be situated below the feet level of the user (Picture E). The deflection angle of the guide over the edge while arresting the fall must be equal or greater than 90° (Picture D). While working the guide of the guided type fall arrester must be used in such a way that there is no slack rope. The length of the guided type fall arrester may be adjusted (sliding the rope grab mechanism over the guide) if the user is not moving in the direction of the fall edge. In order to eliminate the risk of pendulum type fall, the user is allowed to move horizontally not further than 1.5 m in both directions from the vertical axis of the anchorage point (see Picture C). Otherwise, instead of a permanent anchorage point, one should use the anchoring device compliant with EN795 class C or class D standard. If a horizontal anchor rope EN 795 class C is employed, one should consider its possible deflection that influences the free space "H" below the work position. All the information presented in the instruction manual of the horizontal anchoring line should be taken into consideration. The maximum total weight of the user protected with the AC010 device, working in horizontal configuration must not exceed 100 kg. See picture B.

- **ATTENTION:** After a fall over an edge there is a risk of injuries during capture if the falling person knocks against parts of the building or construction. Special rescue procedures related to falls over the edge should be prepared and trained accordingly.



## WORKING ON THE WORKPLACE

- While working on the permanent workplace (work station), the rope grab mechanism should be moved by hand over the body harness attaching point buckle and locked in place on the working rope. It causes the mechanism to be permanently locked in one place thus its mass will not increase the total weight of the user.



## 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 foot 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 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.