

MANUAL ANCHOR POINT



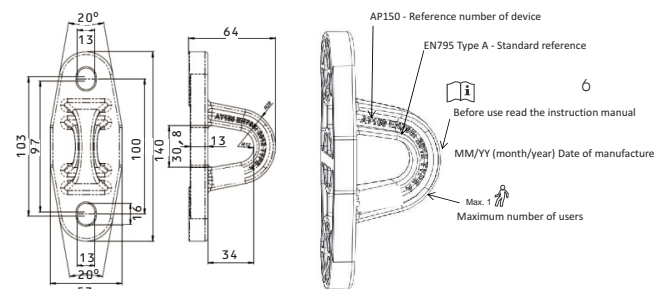
AP150

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CONNECTING FALL PROTECTION SYSTEM TO THE AP150

Fall protection system should be attached the AP150 with EN362 connectors only. The system should be connected to the AP150 in such a way the function of any component of the system is not affected by, or interferes with the function of any other.

NOMENCLATURE OF PARTS



- Anchor point
- Material: aluminium
- Finishing: powdercoat
- Dimensions: 135 x 64 x 62 mm
- Weight: 0.31 kg
- Static strength: 12 kN
- Fixing hole diameter $\varnothing$: 13 mm
- Bore diameter of the catch point $\varnothing$: 26 mm
- Max. number of users: 1

USAGE

Anchor point AP150 is an anchor device class A conforming to EN 795 and is designed for protection of one person. Anchor point AP150 may be used only as personal protective equipment which protects a user against a fall from a height, and cannot be used for lifting loads. The device is made of aluminium alloy using pressure casting technique. In accordance with EN 795:2012 type A strength of this point is min. 12kN in any direction. The device is designed for protection of one person.

The maximum load that could be transmitted in service from the device to the static construction - 9 kN. This is the actual force which the anchor point transfers onto the structure to which it is attached when a fall occurs. If the device is used as a part of a fall arrest system, the user must be equipped with an element limiting maximum dynamic forces applied on user while arresting a fall to max. 6 kN.

INSTALLATION

- Before anchor point AP150 is installed, it must be stored in a place which is: clean, free from any vapours of corrosive substances, and in conditions preventing its mechanical damage. Also please take into account environmental conditions present in the place of installation which may cause corrosion of anchor point and fasteners.
- Installation of the anchor point must be carried out in accordance with rules of fixing on steel structures or concrete elements. When fixing on metal surfaces use bolts M12 of any length and tension grade of no less than A2/70. When fixing on concrete surfaces use through bolts M12 or chemical anchors M12.
- Installation with use of anchors should be carried out in accordance with guidelines specified by the manufacturer of these elements.
- Follow general rules for use of personal fall protection equipment in accordance with EN 795:2012.
- For installation on a concrete surface using through bolts or mechanical anchors the required strength of these surfaces should be greater than 20MPa,
- Anchor point AP150 should be installed above the workplace.
- Example installations are shown in figures

INSTALLATION ON STEEL AND CONCRETE SURFACES

Anchor point may be installed on steel structure the thickness of which is more than 3mm. Drill two holes of 12.5-13mm in diameter spaced 100mm with possible error margin of up to 5mm. Strength of steel structure to which anchor point is to be installed should be calculated and be no less than 12kN.

Fix anchor point AP150 in the drilled holes using M12 bolts of adequate length and strength class, accordingly:

- for galvanized bolts – strength class no lower than 8.8
- for stainless steel (A2) and acid resistant steel (A4) bolts – strength class no lower than 70.

Bolts should be tightened using a torque wrench by applying a torque of no more than 40Nm. Increasing the torque may damage the aluminium structure of anchor point AP150

or break it in case of unevenness of contact surface (Figure 6).

Anchor point AP150 is suitable also for installation in concrete structures using mechanical anchors or chemical anchors of 12mm in diameter. For installation using mechanical and chemical anchors, keep closely to recommendations given by manufacturers of these anchors (drilling depth, drill bit diameter, anchor torque).

Concrete structure should be dense and have no surface cracks or chips.

Mechanical strength of concrete should be no less than 20MPa.

Before installation on concrete structure assess the surface for unevenness. If any unevenness greater than 2mm is found on anchor point installation line, use special EPDM rubber pad to reduce stresses in aluminium structure of the anchor point. In the case of a minor unevenness the rubber pad is not necessary.

Drill two holes of 12mm in diameter and depth of approx. 120mm, spaced 100mm +/- 5mm. Fasteners, as anchors, should be placed in such holes using a hammer (in accordance with instructions for installation of anchors. Anchors should be tightened using a torque wrench with a torque value specified by the manufacturer (usually 40Nm).

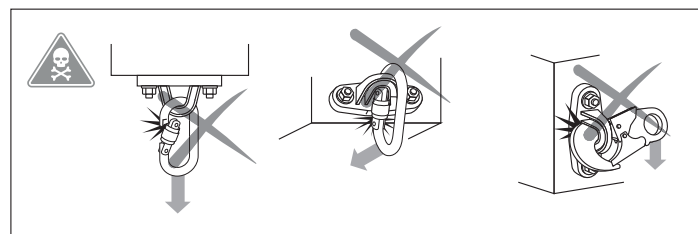
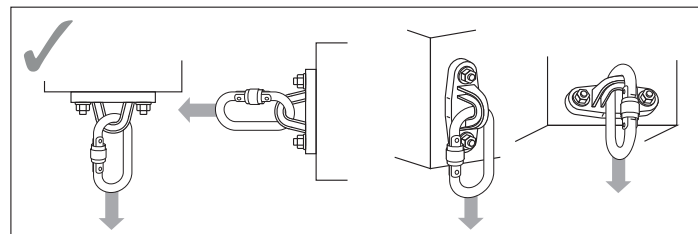
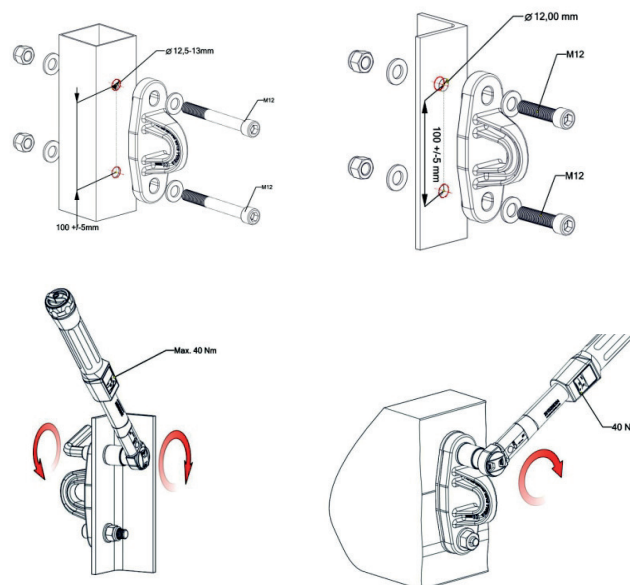
CONNECTING FALL PROTECTION SYSTEM TO THE AP 150

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ESSENTIAL PRINCIPLES FOR USE OF PERSONAL FALL PROTECTION EQUIPMENT

Anchor point AP150 must be used in accordance with instruction manuals for personal fall protection equipment and standards:

- EN 361 - Full body harness
- EN352-3; EN355; EN360 - Personal fall protection equipment
- EN362 - Connectors
- EN 795 - Anchor points



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.

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.

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.

- 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

- 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

- 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 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 (for another procedures shall be introduced according detailed instruction from equipment manufacturer) when it have 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 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

- 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.

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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	

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