



GB - NOTICE: Read and fully understand these instructions before using this equipment.

A. DESCRIPTION

Anchor device AT180 or AT181 is a component of personal protective equipment against falls from a height. It is used to connect fall arrest devices to the structural anchor point. Anchor device AT180 or AT181 conforms the standard EN 795 type A - protection against falls from a height - Anchor devices. Anchor device AT180 or AT181 is appropriate for a single person use only.

B. CONSTRUCTION

Static strength -min. 12kN
 Material: Stainless steel ANSISO4
 Number of person: 1
 Holding down bolt: AT180-M12, AT181-M10

C. MEANING OF THE MARKING

1. reference number
2. number of manufacturing series
3. caution: read the manual
4. manufacturer or distributor marking
5. number and year of issuing an European standards applicable for the lanyard
6. max. number of person
7. The CE mark and number of the notified body responsible for performing the manufacturing process inspection
8. load direction

month and year of the manufacturer's next inspection, Don't use the device after this date. Attention: Before the first use mark the date of the first inspection (date of first use +12 months, e.g. first use 01.2013 - mark inspection 01.2014)

D. ATTACHING ANCHOR DEVICE

1. Example: mounting to concrete surface
 Mechanical anchor
 M12 stud anchor - A2 for AT180
 M10 stud anchor - A2 for AT181
 Minimal strength of concrete: 20 MPa
 Cross section of the anchor.
2. Example: mounting to steel surface
 M12 screw - A2 for AT180
 M10 screw - A2 for AT181
 Cross section of the screw
3. Direction of applying the load
 - a) Vertical wall
 - b) Horizontal wall

INSTALLATION

1. Before installing, the anchor point should be stored in a clean, dry place, in the conditions which prevent from mechanical damage.
2. The installation of the anchor point must be conducted in accordance with the principles of making mechanical and construction connections. For joining, use M12 screws for AT180 anchors, made of at least stainless steel class A2-70. Screw length should be chosen according to the thickness of the elements combined. For joining, use M10 screws for AT181 anchors, made of at least stainless steel class A2-70. Screw length should be chosen according to the thickness of the elements combined.
3. Take into account the environmental conditions prevailing at the installation site, which might cause the corrosion of the anchor point and connectors.
4. Please follow the instructions concerning the installation, contained in the information annex to the EN795 standard.
5. The connection to concrete substrate must be performed using mechanical anchors with the M12 threaded shank. The concrete substrate should have a compressive strength of not less than 20MPa.
6. Installation examples are shown in the drawings.
7. Force transmitted to the structure is less than 12kN. For possible force directions see figure 3.
8. The deflection point does not exceed 5 mm.
9. Check clearance beneath the user!!!

Using the anchor point in connection with fall arrest system must be compatible with use instructions of the fall arrest systems and obligatory standards:
 - EN 361 - for safety harness;

- EN 353-2, EN 355, EN 360 - for fall arrest equipment.
- EN 362 - for the connectors.
- EN 795 - for anchorages.

The structural anchor point should be situated above the working place and the shape of the structural anchor point should not let self-acting disconnection of the device.

E. ANCHOR POINT POSITION

1. Structural Anchor Point min. 12 kN
2. position of fall arrest device
3. level of attachment point of a harness

F. CLEARANCE DISTANCE

The clearance distance H between the work level and the ground level (or other obstacle) has to be determined for the whole protection system depending on used equipment (fall arrester or lanyard), the clearance distance is the sum of distances for each device.

G. BASIC PRINCIPLES OF USE

1. Before installing the anchor point, read this manual and strictly adhere to its recommendations.
2. This manual must always be available for the installer or operator of the anchor point.
3. The anchor point can be installed only by persons with appropriate knowledge and experience in this field, in particular the knowledge of the EN795 standard, the knowledge of anchor installation in accordance with the guidelines of their manufacturers and the knowledge of this manual. The installed anchor point must be checked (approved) by a person competent in this area (e.g. an engineer or a qualified designer), who must also check the construction of the building at the attachment point in terms of its strength.
4. The constructor of the anchor point is entirely responsible for its installation. Neither the manufacturer nor the distributor is responsible for careless or inconsistent with the recommendations assembly. Upon request, the manufacturer and/or distributor provide all necessary technical information concerning the product, its assembly technology, inspection and the product's declaration of conformity.
5. The personal protective equipment used with the anchor point must be attached using a connector compliant with EN362, taking into account the recommendations contained in the instructions for use of this equipment.
6. AT180 or AT181 must only be used for the attachment of personal protective equipment against falls from a height, in accordance with EN795 type A, in such a way that the created protective system complies with EN363 standards.
7. In the case of the installation in materials other than those specified in this manual (e.g. in wood) the calculations checking the compliance of the strength of the attachment with EN795 must be commissioned to a qualified designer.
8. It is forbidden to use the anchor point with apparent defects (corrosion, cracks, deformation).
9. It is forbidden to use the anchor point, which was involved in arresting a fall.
10. It is forbidden to attach more than one person.
11. Using the anchor point for hoisting loads is forbidden.
12. Unauthorized modifications of the device are forbidden.
13. During the installation, the protective system must be planned in such a manner that the anchor point is located above the user.
14. In the protection system limiting force of fall below < 6 kN has to be used for example retractable fall arrester or lanyard with energy absorber.

H. 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.
- 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 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.
- 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 has been used to arrest a fall;
- a full body harness 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.