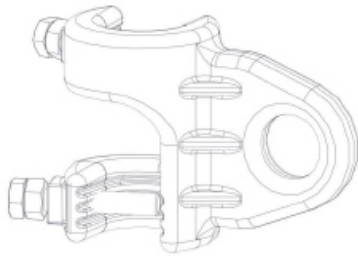




AT187

EN795:2012/B



1. General information

Anchor point AT187 is an anchor device type B compliant with EN 795 and is designed for protection of three people working at the same time. Anchor point AT187 can be used only as personal protective equipment to protect user against a fall from a height, and cannot be used for lifting loads. The device is made of steel. Strength of this anchor point is min. 30 kN.

Anchor point can be loaded in directions shown in Figure 1.

The device can be used to provide protection of three users at the same time.

The device is designed to be installed on ribbed bars with core diameter of 32mm.

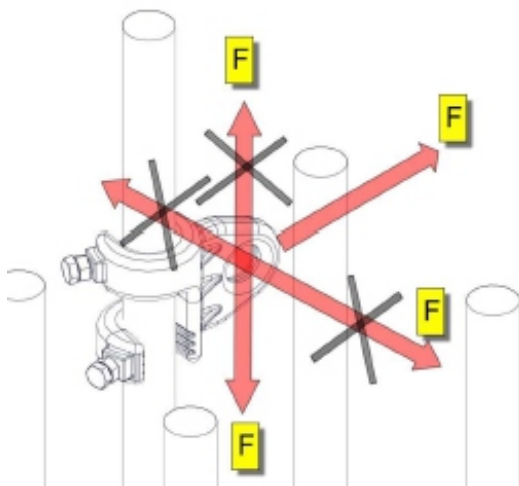
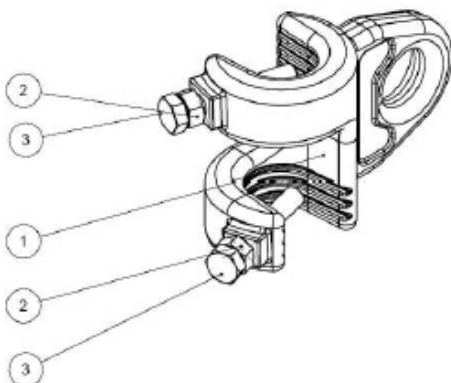


Figure 1. Load directions

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.

2. Construction of anchor point AT187

Figure 2. Construction of anchor point



1. Steel casting of anchor point AT187
2. Lock nuts M10 A2
3. Hexagonal head screws M10x50 A2

3. Time of usage

Maximum time of usage of correctly operating devices is unlimited.

The device must be withdrawn from use immediately and destroyed if it has been used to arrest a fall or there are any doubts concerning its function.

NOTE: Maximum time of usage of the device depends on intensity and environment of use. If the device is used in heavy conditions, being exposed to frequent contact with water, sharp edges, corrosive substances, extreme of temperatures, it may be necessary to withdraw the device after only one use.

4. Periodic inspections

At least once a year, after every 12 months of use, it is necessary to carry out periodic detailed inspection of the device.

Periodic inspection shall be carried out by a service point authorized by the Manufacturer or a competent person with adequate skills, trained in performing inspections of such equipment.

A trained person is a person who, based on own specialized education and adequate experience, has sufficient knowledge in installed protective and rescue equipment, and is familiarized with applicable OHS regulations, guidelines and generally acknowledged technical rules to such extent that is able to assess safety of use and correct application of protection devices.

After 5 years of use, it is recommended that periodic inspections are carried out by the manufacturer of the equipment or an entity authorised by the manufacturer to carry out such inspections.

Before each use of the system check whether date of the next inspection is not expired.

Do not use the device after this date. Before each use of the system visually check the system for its integrity and technical condition and whether steel cable is tensioned.

If any defect or lack of integrity is found, do not use the point.

If any doubts arise as for the use of the equipment, please contact the manufacturer and never repair the equipment on your own!

A system which has been used to arrest a fall must be withdrawn from use immediately!

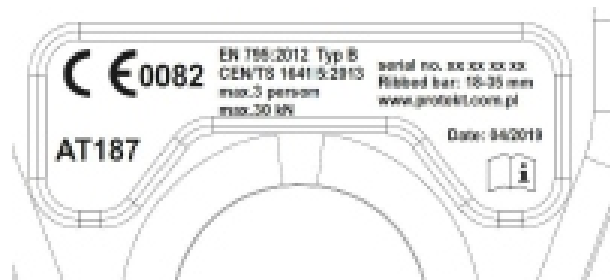
The system which has been used to arrest a fall may be admitted for use again after a detailed inspection is carried out by the manufacturer or an authorised service point.

When using the system, pay special attention to risks affecting the protective equipment operation or the user's safety, and in particular to kinks and rope movement on sharp edges, oscillatory falls, electricity, influence of extreme temperatures, equipment damage, negative influence of environmental factors, chemical substances and contamination.

Do not modify, repair components of the system or replace them with non-original spare parts.

5. Device marking

Figure 3. Marking of the product



6. Installation of anchor point

Before anchor point AT187 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. For fixing use screws M10 with a length greater than 50mm and strength class of no less than A2/70.

Installation of anchor points 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.

Heights of anchor point installation are described in item 7 of the manual.

It is recommended to install the anchor point flush with the cast reinforced concrete, then it will be not necessary to add deflection of ribbed bars to deflection of the whole system.

7. Installation of anchor point AT187

It is advisable to install the anchor point as close to a reinforced-concrete structure as possible. The aim is to eliminate the need of additional calculation of deflection of ribbed bars.

If it is necessary to install the anchor point higher, in calculations of SAFE FREE SPACE UNDER USER add value X for direct connection with energy absorbing and connecting components and value 2X for installation with use of horizontal lifelines.

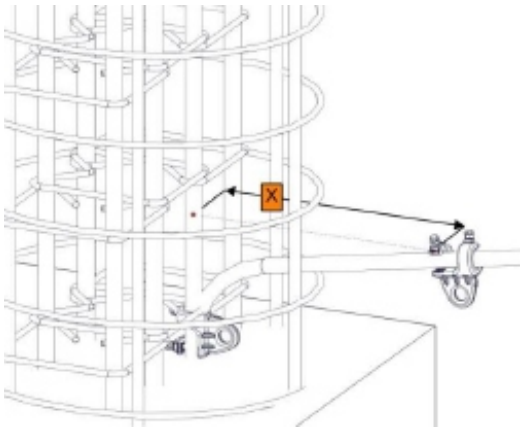


Figure 4. Recommended installation of anchor point AT187

x – height at which anchor point is installed above concrete structure.

In justified cases (no possibility of installation due to formworks, concrete splashes set on bars, formworks located above concrete level, etc.) it is acceptable to install anchor points for:

Direct connection of anchor point AT187 to energy absorbing and connecting component – height of up to 1500mm above concrete structure for ribbed bars with core diameter 18–32 mm.

Figure 7. Installation with horizontal anchor systems

– height up to 1100mm above concrete structure for ribbed bars with core diameter 28–32mm. Figure 8

In order to install the anchor point it is necessary to check the depth of bar anchoring in the concrete structure.

The bar should be anchored in concrete to a depth of more than 700mm.

Diameter of ribbed bar to which the anchor point will be installed should be greater than 18mm and no greater than 35mm measured at outer diameter of the bar (core 32mm).

Apply slot of anchor point at ribbed bar and turn by 90 degrees (Figure 5)

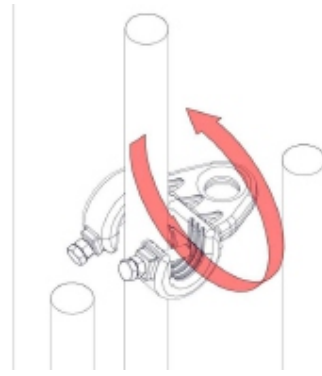
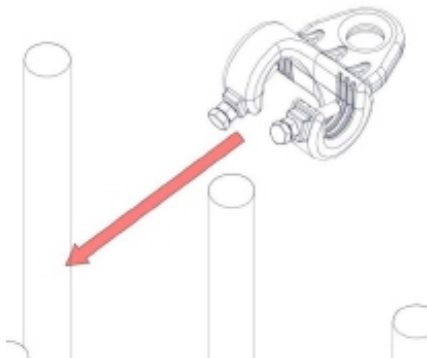


Figure 5. Installation of anchor point on bar

While holding anchor point AT187 tighten both mounting screws (Figure 6) using torque wrench (1) to 30–40 Nm. Then tighten lock nut to prevent the screw from unscrewing with use of flat wrench 17mm (2).

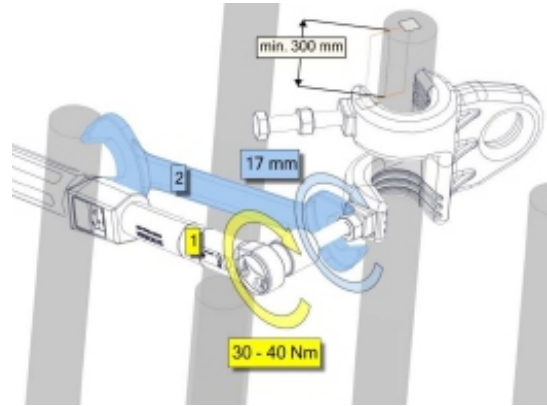


Figure 6. Installation of anchor point on bar

Next, using torque wrench, tighten to 30–40 Nm.

If the anchor point is going to be used by directly connecting it to energy absorbing and connecting components it is necessary to meet the following conditions Figure 7:

Diameter of ribbed bar core should be greater than 18mm.

Lower surface of anchor point AT187 cannot be installed on the bar higher than 1500mm above concrete structure surface.

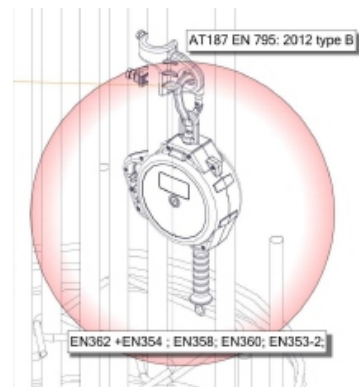
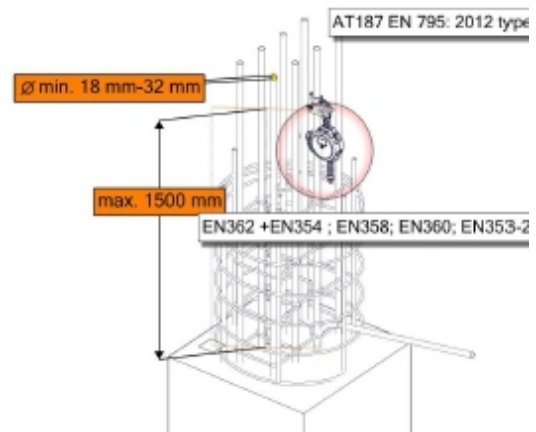


Figure 7. Installation of energy absorbing and connecting components directly to anchor point

If the anchor point is going to be used with horizontal anchor system compliant with EN 795:2012 type B, C, and Figure 8 it is necessary to meet the following conditions:
Diameter of ribbed bar core must be 28–32 mm.
Lower surface of anchor point AT187 cannot be installed on the bar higher than 1100mm above concrete structure surface.
It is necessary to include additional deflection of horizontal lifeline by a height at which anchor points AT187 were installed Figure 9.

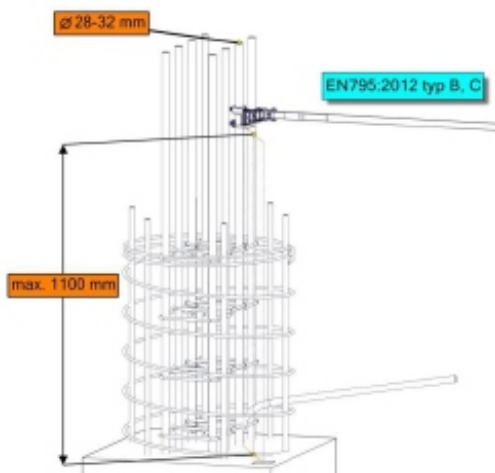


Figure 8. Installation of horizontal lifelines in connection with anchor point AT187

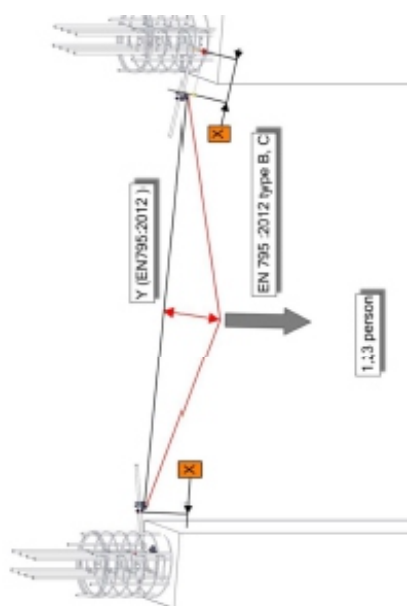


Figure 9. Include deflections of bars above concrete level.
X – height at which anchor point is installed above concrete structure.
Y – deflection of horizontal lifeline in accordance with its instruction manual

8. Principles for use of personal fall protection equipment

Anchor point AT187 must be used in accordance with instruction manuals for personal fall protection equipment and standards:

EN 361 - for full body harness

EN 352-3; EN 355; EN 360 - for personal fall protection equipment

EN 362 - for connectors

EN 795 - for anchor points

- personal fall protection equipment should be used only by personnel trained in this respect.

- personal fall protection 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.

- prepare a rescue plan to be implemented whenever necessary.

- 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 manufacturer of the equipment or his certified representative.

- personal fall protection equipment shall not be used for any purpose other than intended.

- personal fall protection equipment provides individual protection and shall be used by one person only.

- before each use make sure that all parts of the fall arresting system cooperate correctly. Periodically examine connections and fitting of components of the equipment to prevent any accidental loosening or disconnection.

- it is forbidden to use a combination of equipment where function of any one item is affected by, or interferes with the function of any other.

- before each use of personal fall protection equipment, a pre-use check should be carried out to ensure that it is in a serviceable condition and operates correctly.

- in particular, inspect all accessible elements of the equipment for any damages, excessive wear, corrosion, abrasion, cutting or improper function. On individual devices pay particular attention to:

- in full body harness and work positioning devices: buckles, regulating elements, attachment points (buckles), webbing, seams, belt loops;

- in energy absorbers: attachment loops, webbing, seams, housing, connectors;

- in lanyards and textile guides: rope, loops, thimbles, connectors, regulating parts, splices;

- in lanyards and steel guides: rope, wires, clamps, loops, thimbles, connectors, regulating parts;

- in retractable type fall arresters: lanyard or webbing, retractor and locking mechanism for proper operation, housing, energy absorber, connectors;

- in guided type fall arresters: body, proper guiding, locking mechanism for proper operation, rollers, bolts and rivets, connectors, energy absorber;

- in connectors (snap hooks): load-bearing body, rivets, main pawl, function of locking gear.

- at least once a year, after each 12 months of use, personal fall protection equipment must be withdrawn from use to carry out periodic detailed inspection. Periodic inspection can be carried out by a properly trained and skilled person.

Periodic inspections can be carried out also by manufacturer of the equipment or his authorized representative, or an authorized company. Inspect in detail all accessible elements of the equipment paying attention to any damages, excessive wear, corrosion, abrasion, cutting or incorrect function (see the above item.) In some cases, if the fall protection equipment has a complex design (e.g. fall arresters), periodic inspections can be carried out by manufacturer of the equipment, or his authorized representative only. After the periodic inspection, date of the next inspection should be arranged.

- regular periodic inspections are essential in respect of the equipment condition and safety of users which is dependant on functionality and durability of the equipment.

- during periodic inspection it is necessary to check the legibility of all markings on the equipment (identity label of the device).

- all information on fall protection equipment (name, serial no., date of purchase and date of first use, name of user, information on repairs and inspections and withdrawal from use) must be provided in the identity card of the device. It is responsibility of the user organisation to provide the Identity Card and to fill in the required details. The Identity Card should be filled in by a person responsible for protective equipment. It is forbidden to use personal fall protection equipment if the Identity Card is not filled in.

- if the product is re-sold outside the original country of destination the reseller must provide instructions for use, for maintenance, for periodic inspection and for repair in language of the country where the product is to be used.

- personal fall protection equipment must be withdrawn from use immediately if any doubts arise in regard of its condition, or proper operation. The device must not be used until manufacturer of the equipment carries out a detailed inspection and gives his written consent to use the equipment again.

- personal protection equipment must be withdrawn from use immediately and destroyed if it has been used to arrest a fall.

- full body harness is the only acceptable device to be used to support the user body in personal fall protection equipment.

- in full body harness use only attaching points (buckles, loops) marked with capital letter "A" to attach a fall protection system.

Anchor points (of devices) of the fall protection equipment should have a stable structure and position so as to prevent a possibility of the load fall and minimize a free fall distance. The equipment's anchor point should be located above the user's work station. The shape and construction of the anchor device/point shall not allow for a self-acting disconnection of the equipment. It is recommended to use certified and marked anchor points of the equipment compliant with EN 795.

- it is obligatory to verify the free space required under the user at workplace before each occasion of using the personal fall protection system, so that, in case of a fall, there is no collision with the ground or other obstacle in the fall path. The required free space is specified in the instruction manual of the equipment to be used.

- when using the equipment pay particular attention to hazardous situations and environmental factors which may affect the performance of the device, and in particular to:

- trailing or looping of device lanyards over sharp edges;

- pendulum falls;

- electrical conductivity;

- any damages such as cuts, abrasions, corrosion;

- extremes of temperature;

- negative influence of weather conditions;

- corrosive substances, chemicals, solvents, acids.

- personal fall protective equipment must be transported in a package (e.g.: bag made of moisture-proof textile or containers or boxes made of steel or plastic) to protect it against damage or moisture.

- personal fall protective equipment should be cleaned without causing adverse effect on the materials used in the manufacture of the equipment. For textile materials (webbings, ropes) use agents suitable for delicate fabrics. They can be hand- or machine-washed, and then rinsed thoroughly. Wash textile products with water only. When the equipment becomes wet, either from being in use or after cleaning, allow it to dry naturally, and keep it away from a direct heat. In metallic products lubricate some mechanical parts (springs, hinges, pawls, etc.) regularly to improve their operation.

- personal fall protective equipment should be stored loosely packed in well-

