

Use and instruction manual of connecting lanyard with fall indicator AZ411
EN 795:2012 Type B
CEN/TS 16415:2013



# TABLE OF CONTENTS:

1. General	1				
2. Overall dimensions of connecting lanyard	2				
3. Time of usage	2				
4. Periodic inspections	2				
5. Marking of device	3				
6. Installation of anchor point	3				
7. Installation of device	3				
8. Essential principles of use of personal protective equipment against falls					
from a height	3				
9. Warranty	5				
10. Identity card	5				

# 1. General

Connecting lanyard AZ411 is an anchor device compliant with EN 795 Type B and can be used to provide protection of 3 users at the same time. Connecting lanyard AZ411 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 composed of PVC-coated galvanized steel cable and aluminium thimbles.

According to EN 795:2012 Type B static strength of this anchor point is min. 14kN towards direction of force, and in configurations as shown in Figure 1, the device can be used by 3 users at the same time.

The maximum load that could be transmitted in service from the device to the static construction - 10 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.

The device cannot be installed so support line of the device touches a sharp edge with radius of below  $0.5\,\mathrm{mm}$ .

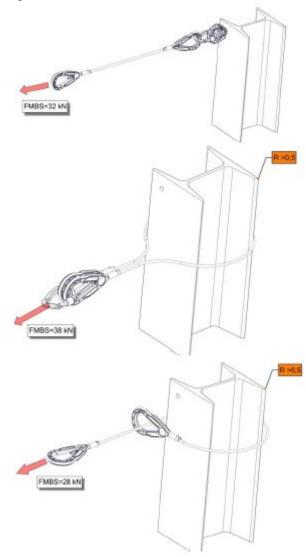


Figure 1. Acceptable methods of installation of device



# 2. Overall dimensions of connecting lanyard

KEY: L=usable length

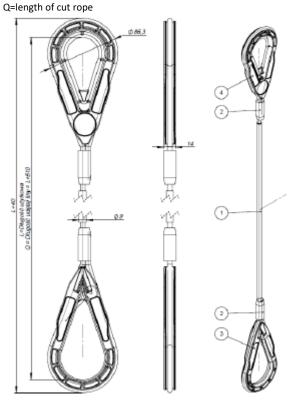


Figure 2. Overall dimensions AZ411

# 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 The device must be withdrawn from use immediately and destroyed if it has been used to arrest a fall or there are any doubts concerning its function.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 service point authorized by the Manufacturer located at the following address:

PROTEKT Grzegorz Łaszkiewicz ul. Starorudzka 9 93-403 Łódź

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 regards 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 authorized 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, adverse environmental factors, chemical substances and contamination. Neither modify, repair components of the system nor replace them with non-original spare parts.



# 5. Device marking

KEY: Serial number Date of manufacture

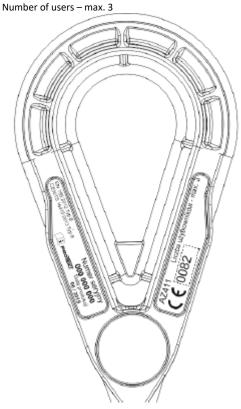


Figure 3. Method of device marking 6. Installation of anchor point

Before anchor point AZ411 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 anchor point must be carried out by a properly qualified and skilled person familiarized with the instruction manual.
- Follow general rules for use of personal fall protection equipment in accordance with EN 795:2012,
- Example installations are shown in Figure 1

#### 7. Installation of device

Three acceptable methods of installation are given in Figure 1 The device is equipped with fall indicator which deforms, breaks, bends if the device is affected by an instantaneous force of 3–4kN. If the fall indicator is damaged or shows any signs of deformation, it can be presumed that the device has been used to arrest a fall.

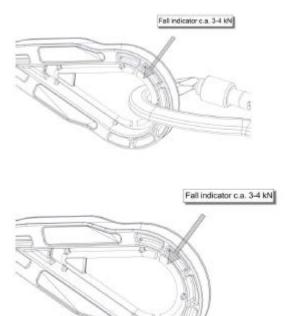


Figure 4. Fall indicator

# 8. Essential principles of use of personal fall protection equipment

- Anchor point AZ411 must be used in accordance with instruction manuals for personal fall protection equipment and standards:
- EN 361 for full body harnesses
- EN 352-3; EN 355; EN 360 for fall restraint devices
- EN 362 for connectors
- EN 795 for anchor points
- personal fall protection equipment should be used only by personnel trained in its use.

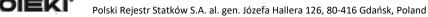


- personal fall protection equipment must not be used by a person with medical condition that could affect the safety of the equipment user in normal and emergency use.
- prepare a rescue plan to be implemented whenever necessary.
- it is forbidden to make any alterations or additions to the equipment without prior written consent given by the manufacturer.
- 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 fall protection 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. For individual devices pay particular attention to:
- in full body harnesses 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 every12 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 defined.

- regular periodic inspections are essential in respect of the equipment condition and safety of users which is dependant on the equipment functionality and durability.
- during periodic inspection it is necessary to check the legibility of all the equipment markings (identity label of the device).
- all information on protective equipment (name, serial no., purchase date 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 user's organisation to provide the Identity card and to fill in the required details. The Identity card should be filled in by a person in charge of fall protection equipment in user's organisation. It is forbidden to use personal fall protection equipment if the Identity Card is not filled in.
- if the equipment 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 equipment 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 admissible device to be used to support the user's 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.





9. Warranty

The manufacturer grants a warranty for 12 months from the date of purchase of the device. If a defect is found in any part, the warranty and guarantee period for this part is extended by the time of repairs and effective removal of the defect found.

The warranty covers:

- Defects in material,
- Structural defects,
- Anti-corrosion coating defects

In order to keep the warranty, it is necessary to follow procedures of periodic inspections specified in item 4 of the Instruction manual.

10. Identity Card

IDENTITY CARD FOR ANCHOR POINT AZ411 (conforming with EN36)						
Reference number of device		AZ411	•	number:		
Date of first use (installation)			Date of	f manufacture:		
Insta	llation location					
User	name:					
Inspection and repair record						
No.	Date of inspection	Type of inspection/ repair	Remarks	Date of next inspection	Name and signature of technician	
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						