

# 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).

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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



