

Installation manual

SecuRope Fixed Ladder Lifeline



FALLPROTEC



Safety Rail Source
2570 Blvd of the Generals
Suite 200
Norristown, PA 19403
877-723-3766
www.SafetyRailSource.com




1. Introduction

The anchor must only be installed by qualified persons or organizations who will have an "approved installer" certificate issued by Fallprotec.

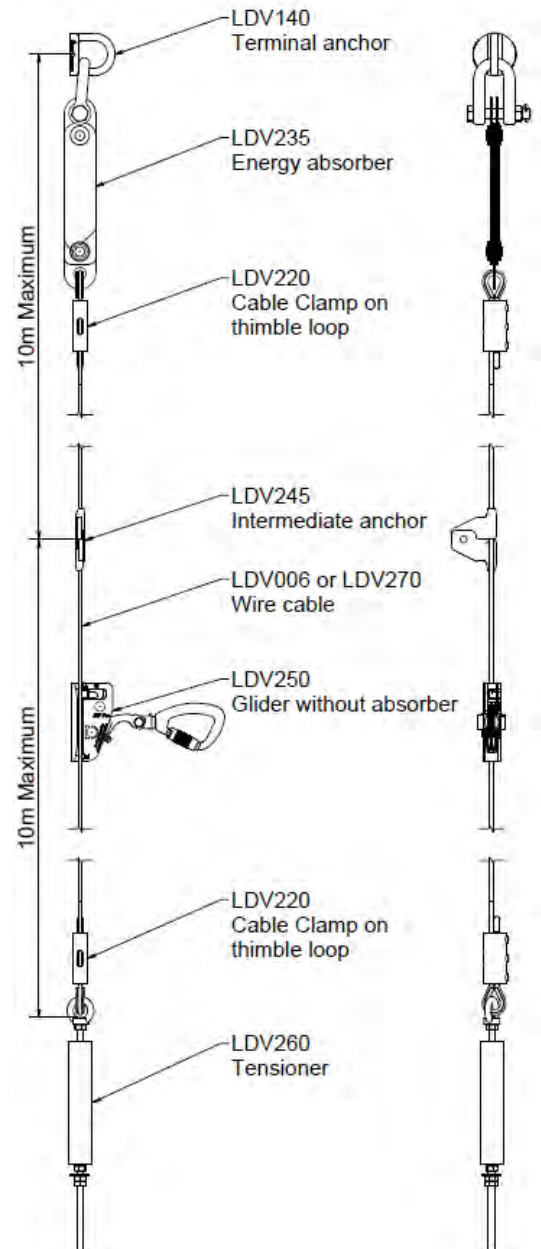
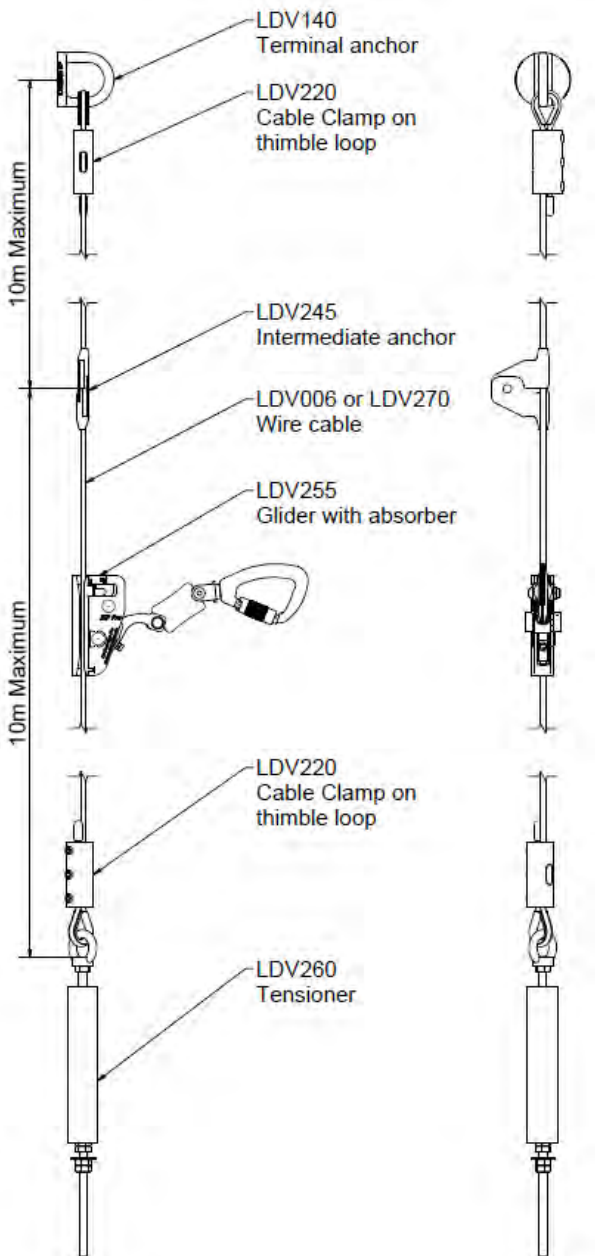
The installation must be checked appropriately by calculation or tests. For more information on a specific product (i.e certificates, plans, data sheets) please contact Fallprotec or go to your reseller area on our web portal.



2. Tools needed

Description	
	<ul style="list-style-type: none"> • Flat key set • Allen key set
	<ul style="list-style-type: none"> • Level
	<ul style="list-style-type: none"> • Grinder
	<ul style="list-style-type: none"> • Electrical tape
	<ul style="list-style-type: none"> • 2 Pliers

3. Equipment



Code	Description
LDV006	Stainless steel wire cable \varnothing 8mm 7x7
LDV140	Securope Terminal Anchor
LDV220	Cable clamp on thimble loop
LDV232	Terminal anchor fixation
LDV235	Shock absorber
LDV241	Intermediate anchor fixation
LDV245	Intermediate anchor
LDV250	ZIP Pro without absorber
LDV255	ZIP Pro with absorber
LDV260	Tensioner
LDV266	Tensioner fixation
LDV270	Zinc plated wire cable \varnothing 8mm 7x19
NSV018	Extension to be mounted on ladder to access to the roof

4. Resistance of the host structure

The installer must ensure that the host structure withstands the maximum load indicated below with a safety factor of 2 at the breakup.

Maximum load applied to the host structure	6 kN
Maximum deformation	120 mm (Deformation due to shock absorber)

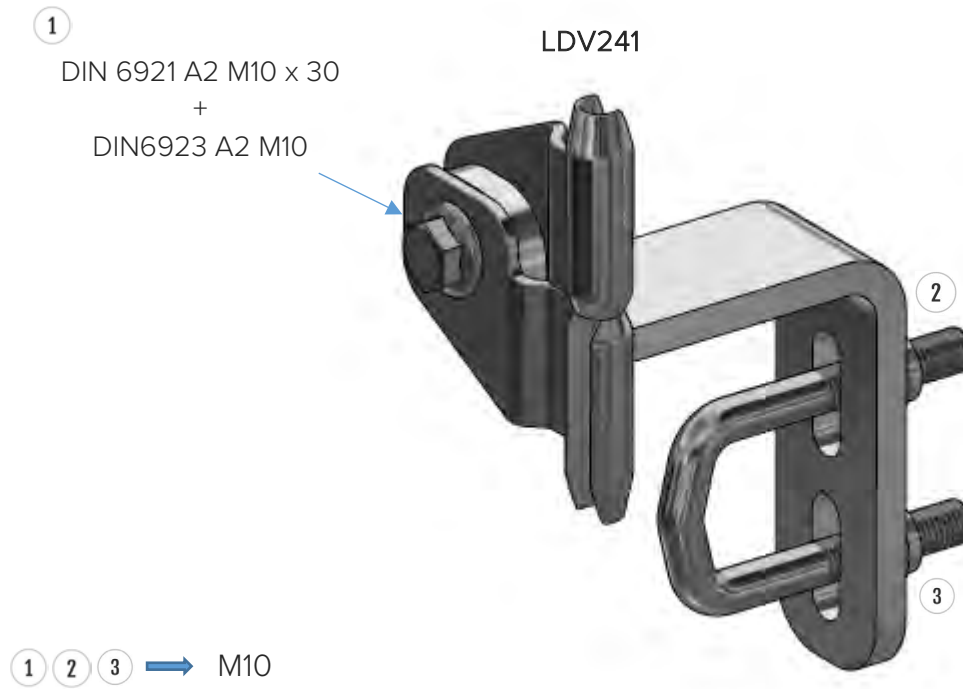
5. Fixation system

5.1. Fixation for terminal anchor



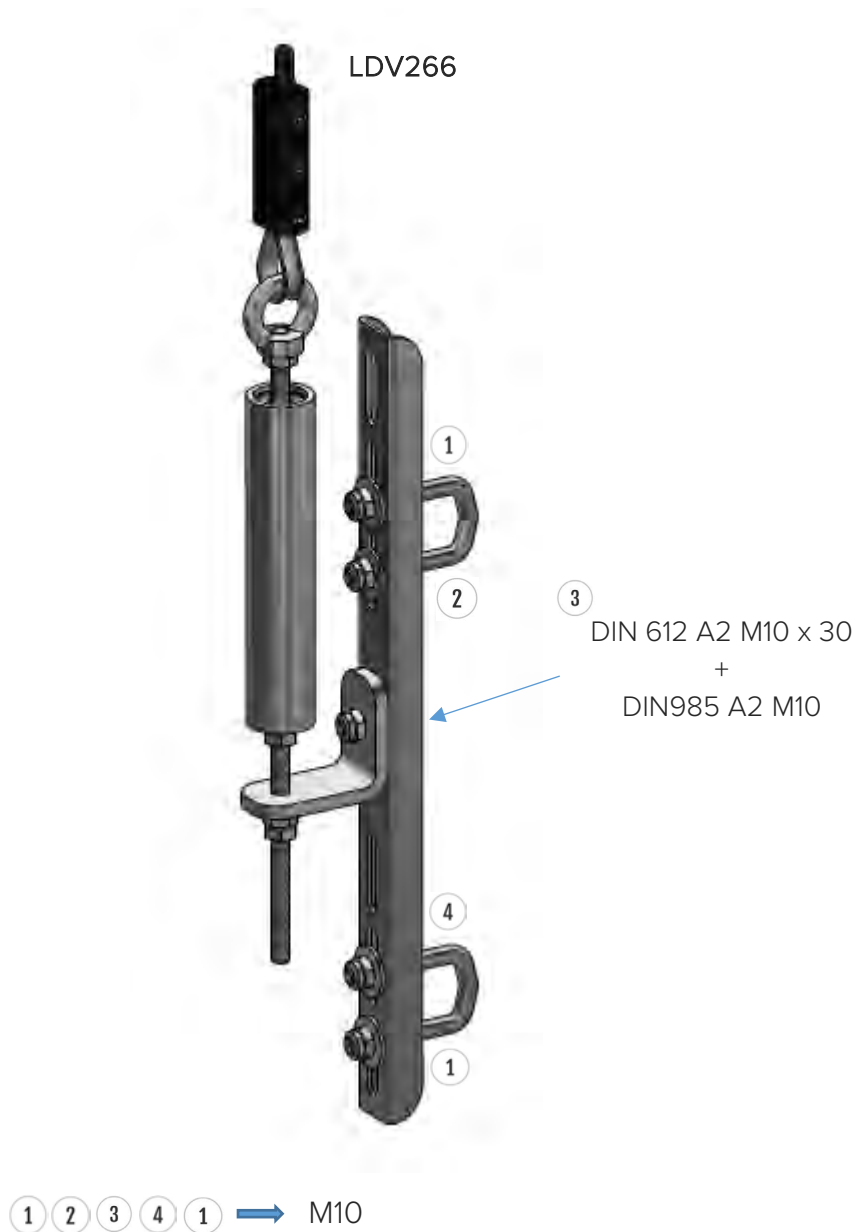
Fixation	Tightening torque
M10	25 Nm

5.2. Fixation for intermediate anchor



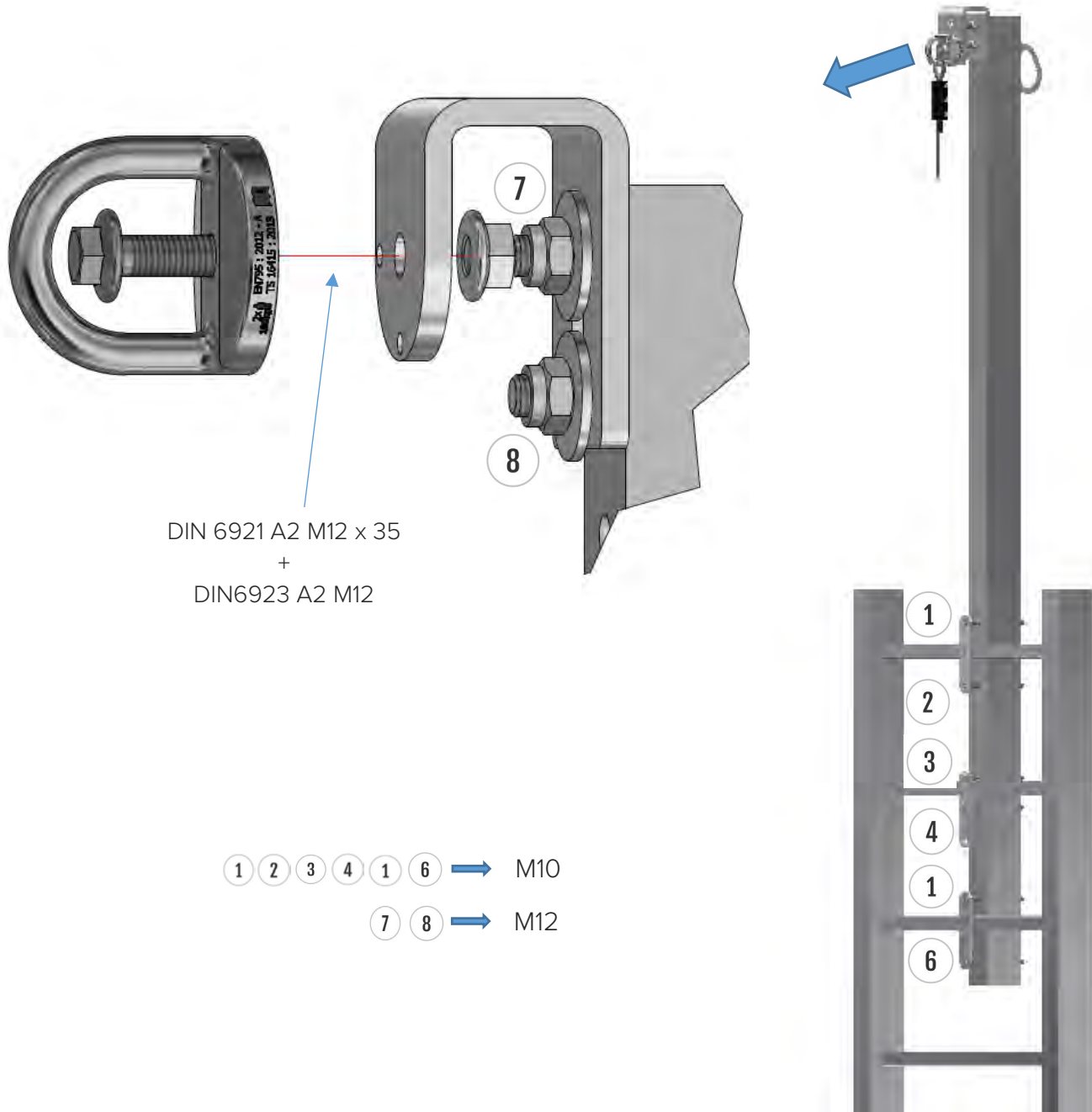
Fixation	Tightening torque
M10	25 Nm

5.3. Fixation for tensioner



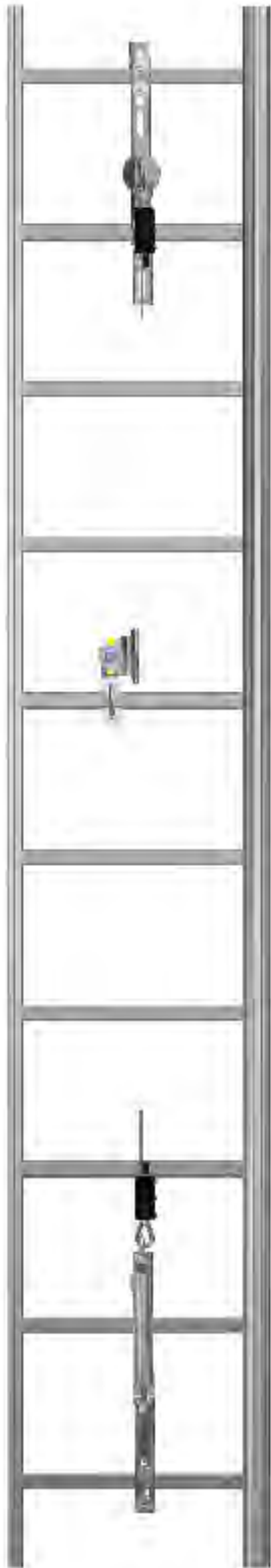
Fixation	Tightening torque
M10	25 Nm

5.4. Extension to be mounted on ladder to access the roof



Fixation	Tightening torque
M10	25 Nm
M12	45 Nm

5.1. Position of fixations



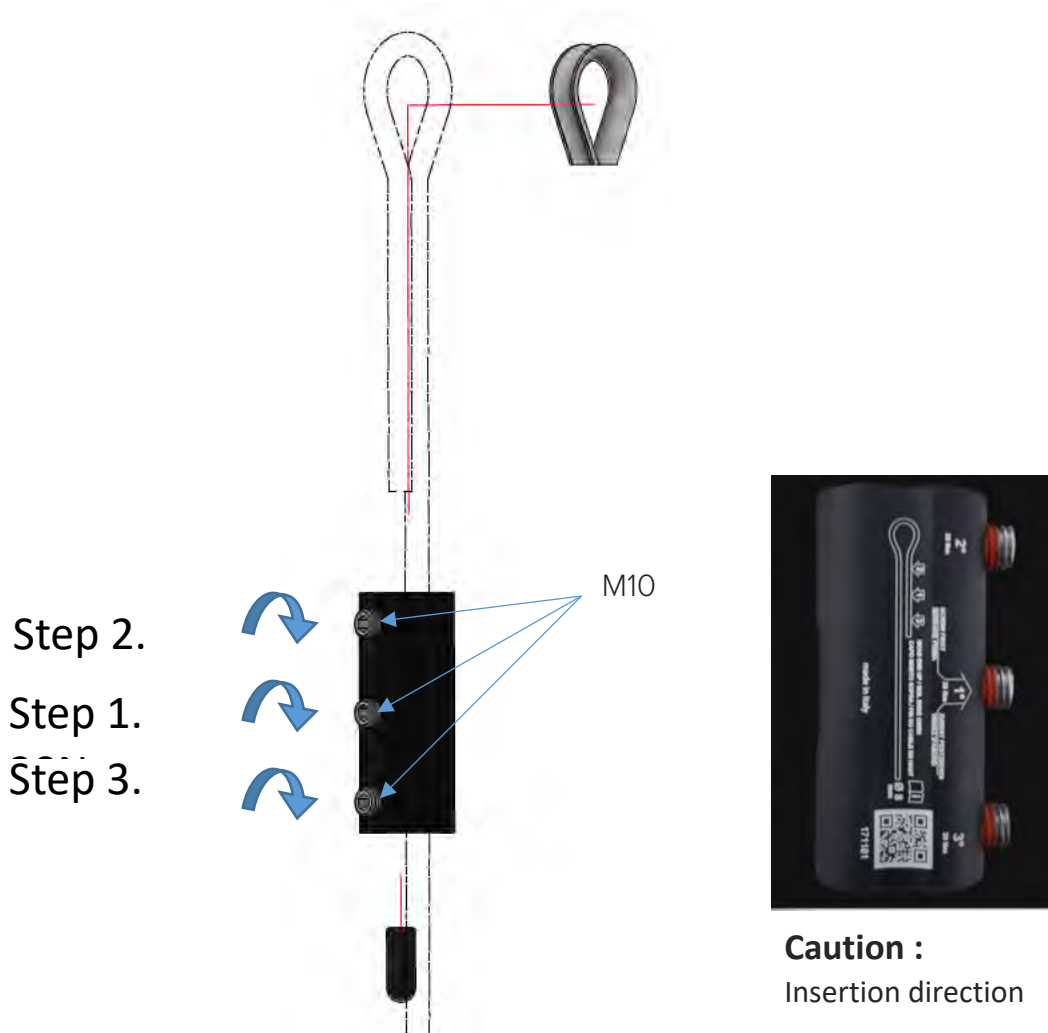
Middle of the ladder



Left side of the ladder

6. Articles

6.1. Cable clamp on thimble loop



Caution:

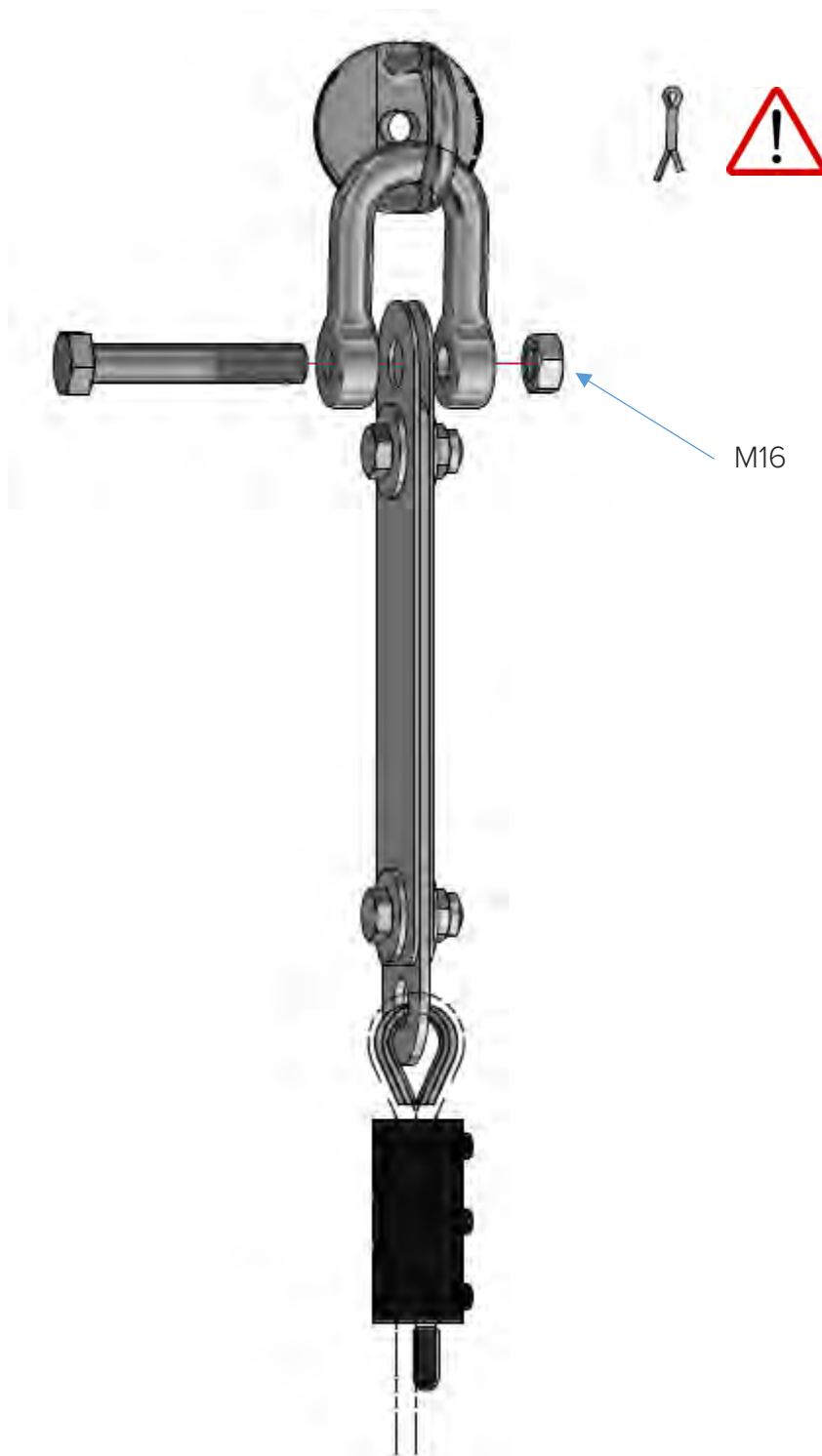
The LDV220 can only be tightened ONCE. The glue on LDV220 is a reliable system, but the headless bolts cannot be tightened/untightened multiple times.

If the installer does so, he must:

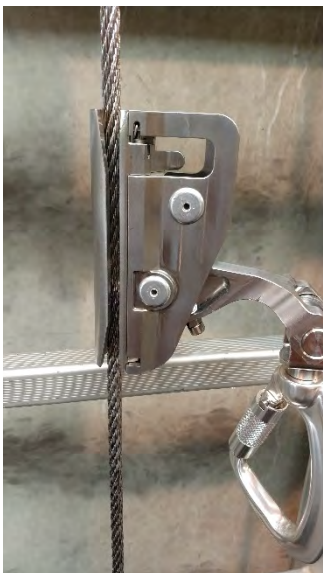
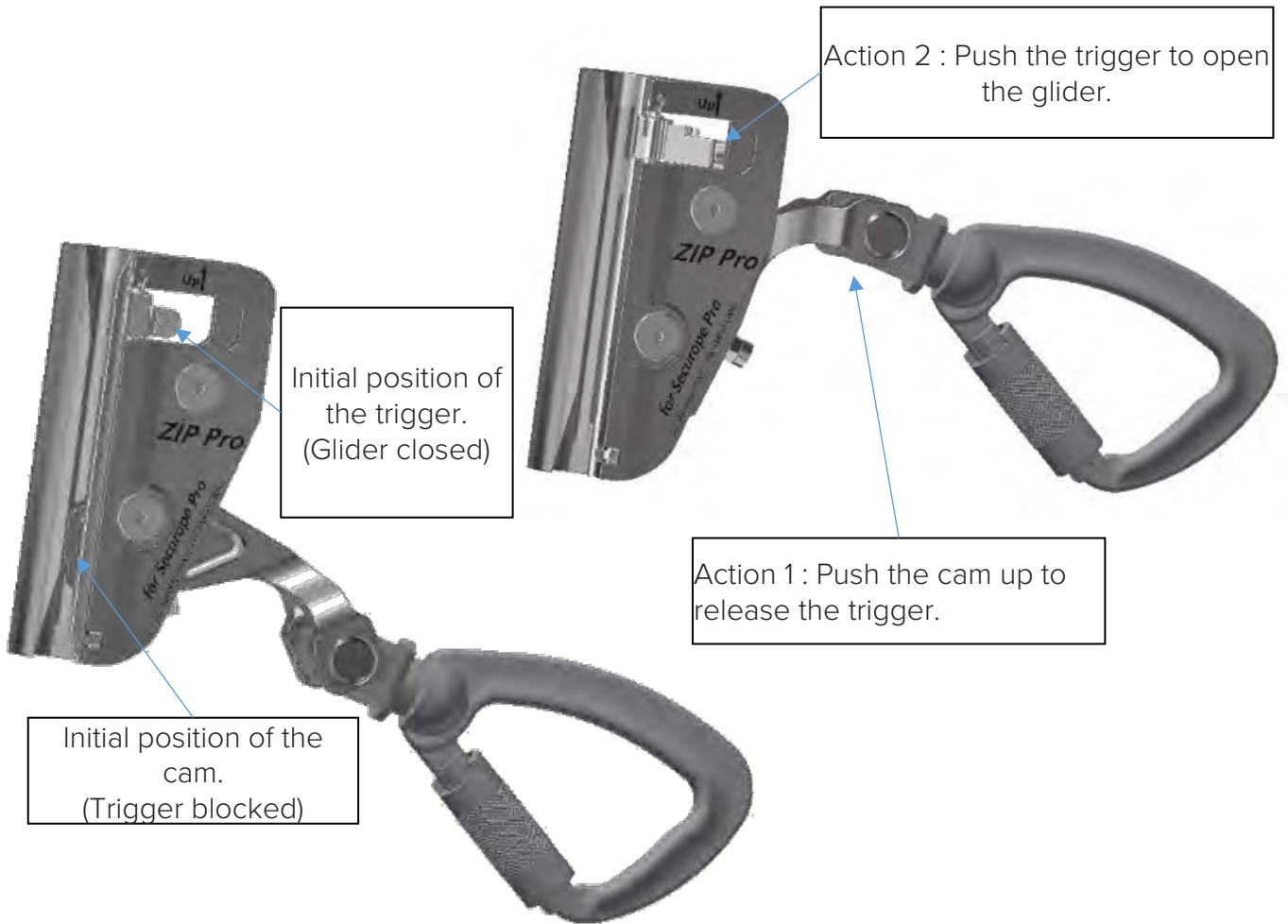
- remove the red hard glue with a stainless-steel brush
- put strong liquid thread lock

Fixation	Tightening torque
M10	20 Nm

6.2. Shock absorber



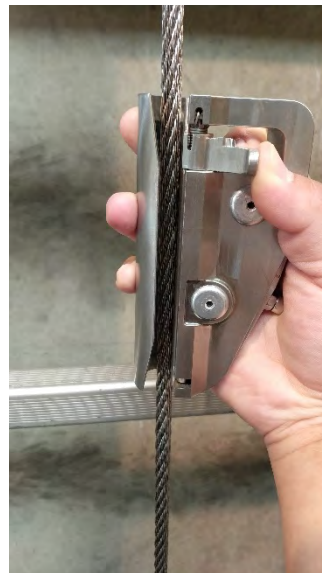
6.3. Glider



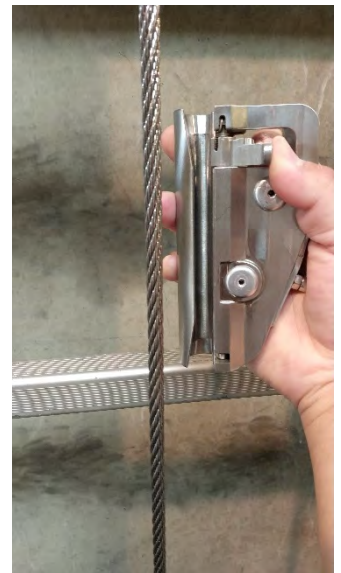
Initial position



Action 1

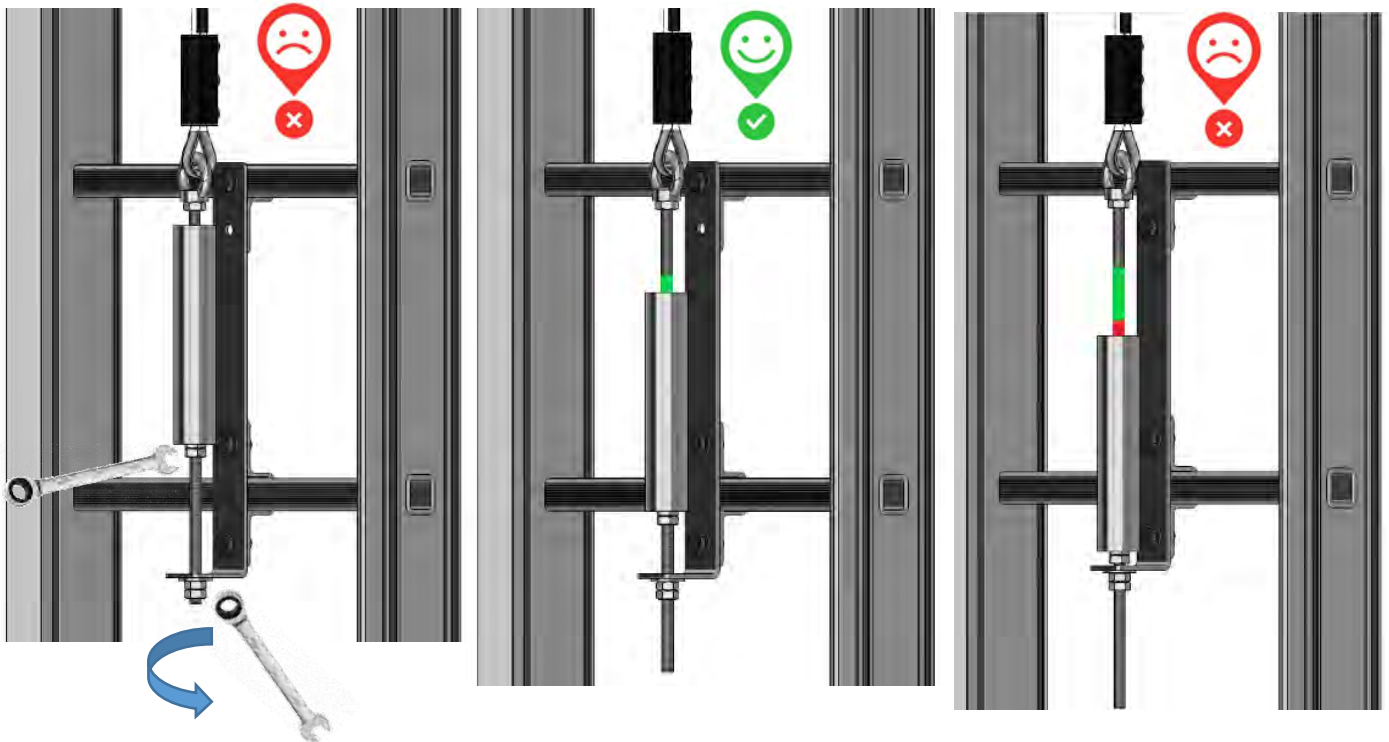
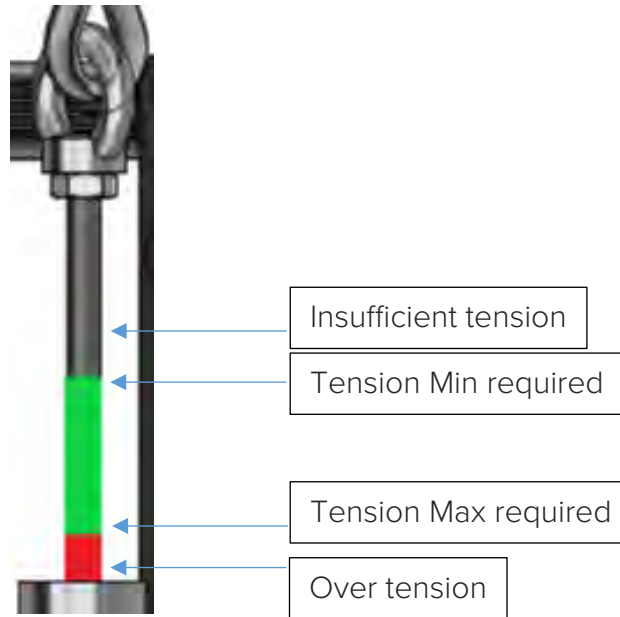


Action 2



Glider detached

6.4. Tensioner





7. Recommendations

- Due to the risk of invisible stress corrosion cracking, if the mobile fall arrest system including a rigid belay support is to be installed in a highly corrosive atmosphere and compatibility is not established, specific control measures should be implemented.
- The installer will have ensured that the receiving structure on which the upper anchor is fixed is dimensioned to withstand a downward force of $(6+(\text{number of users}-1)) \times 2$ kN given a safety factor of 2. (i.e. for 4 users : $(6+3) \times 2 = 18$ kN)
- In case the lifeline is installed on a flexible structure with important deformations (i.e. meteorological tower), the installer must ensure the structure does not deform more than 100 mm in the direction of the length of the lifeline. Otherwise please contact Fallprotec to determine whether special measures are needed or not.
- In case the lifeline is subjected to heavy winds, it is recommended to use distances between intermediate anchors between 5 to 8 m, used irregularly. (i.e. span 1: 5m, span 2: 7m, span 3: 5m ... span N: 8 m). As a conservative measure, one can estimate that above 30m in open terrain, we systematically could have strong winds.
- The rigid belay support must be installed vertically.
- The fall arrester must not extend beyond the ends of the rigid belay support (i.e. fixed or retractable stop).
- The system forms a whole: no component can be removed or replaced.
- The place of engagement of the fall arrester must be chosen where there is no risk of falling.
- The user must be able to access and leave the entry / exit point safely.

8. Identification plate

It is mandatory to install the plate nearby the anchor line, in the zone where the users attach themselves.

The plate is generated by our web portal *Fallprotec Assistant* and can be printed on a printer with the sticker provided by Fallprotec (weather resistant). The commissioning date must appear on the plate.



- 1 Manufacturer informations and a QR code to get direct access to the informations related to the installation.
- 2 Equipment type and applied standards.
- 3 Logo, name and installer address.
- 4 Symbols indicating it is mandatory to use a fall arrest harness with an energy absorbing system according to EN355.
- 5 Maximal number of users and their weight.
- 6 Installation place informations.
- 7 Commissioning date
- 8 Symbol indicating it is mandatory to read the user manual first.
- 9 Unique serial number.

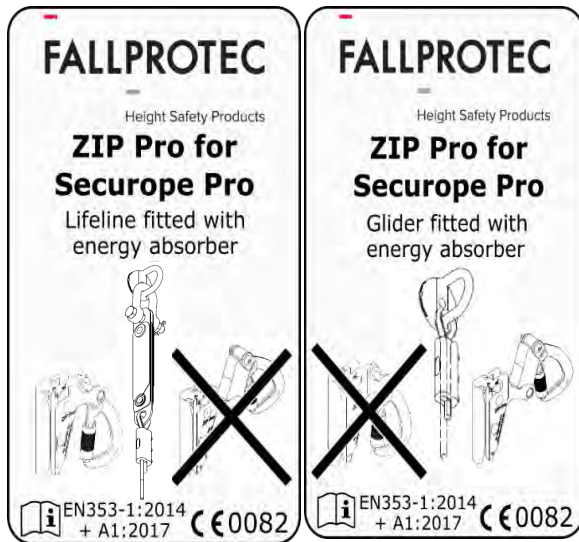


The sticker will be fixed on a plate, which can be manually folded depending the installation environment.

A self-locking Tag including an unique serial number must also be installed.



The nameplate must be attached near the area where users are hooking.



A marking label is installed on the system where the users are hooked.

9. Documents to be provided after an installation

- Documentation should at least contain the following informations :
 - address and location of the installation ;
 - name and address of the company responsible for the installation ;
 - name of the person responsible for the installation ;
 - product identification (manufacturer, type, model...);
 - fixation device (manufacturer, product, admissible constraints) ;
 - schematic drawing of the installation, for example from the roof, and the pertinent informations for the user, such as the anchor points positioning.
- Declarations made by the responsible installer should be signed and at minimum assure that the anchor line :
 - has been installed according the manufacturer installation instructions ;
 - is conform to the drawing ;
 - has been fixed on the specified support ;
 - has been fixed as specified (for example, bolts quantity, conform materials, conform location) ;
 - has been out in service according to the instructions provided by the manufacturer ;
 - has been provided with photographic informations/documentation, specially when the fixations (for example the bolts) and the fixing interfaces are no longer visible the installation complete.
- When several anchor points have to be photographed for identification, numbering marking is recommended. The numbering has to be included in the anchor points inspection folders and the installation area drawing.