

## 8 - SPECIFIC INFORMATION

Master text

The category III Personal Protective Equipment **826.040 "ZIP EVO"** and **826.050 "ZIP EVO HOOK"** are:

- two sheaves per device mounted in a bracket used to link a rope or an accessory cord to a connector reducing the friction while the rope or accessory cord is moving under load;
- self-closing Mobile Connecting Devices not automatically self-locking, only when used with the protection (E);
- part of a system protecting against impact caused by fall from a height;
- certified according to EN 12278:07 and EN17109:2020 type A.

**Fig. 1 - Examples of connection to the attachment point (G) -** The attachment point (G) is specially designed to guarantee a direct and safe connection with lanyards via "lark's foot".

**Fig. 2 - Protection (E) installation -** The cap protection (E) is an accessory designed to avoid finger entrapment, a hazard common with pulleys.

**Fig. 3 - Use as pulley -** When assembling the system take in account the breaking Load of device (BL=22kN or 5000lb), its Working Limit Load (WLL=10kN), and also a Safety Factor chosen by the user.

**Fig. 4 - Use as Mobile Connecting Device -** A second Individual Safety System can be positioned upstream of this device. The plate (F2) of the 826.050 is designed to reduce the burden on the other MCD.

**Fig. 5 - Example of wrong and dangerous use.**

**Fig. 6 - Force composition -** By reducing the deflection in a cable/rope (therefore widening the angle  $\alpha$ ), the forces acting on the anchoring points exponentially increase.

**Compatibility -** This device has been designed to be used with:

- cables and ropes with diameter less than 13mm;
- connectors according to EN362 and/or EN12275;
- When used in Individual Safety Systems for rope courses according to EN15567-1, it is suitable to create ZAZA1 series or ZAZA2 series of Individual Safety Systems. It also is required:
  - the use of the protection (E);
  - that all connection in the user reach between this device and its lanyard shall only openable with a tool (a lark's foot of is considered not openable).
- Check before and after use -** Before and after use, make sure that the device is in an efficient condition and that it is working properly, in particular, check that:
  - is suitable for the use you intend to make of it;
  - the sheaves (B) rotate freely;

- has not been mechanically deformed;
- shows no sign of cracks, wear, corrosion and oxidation;
- the rope/cable does not scratch the bracket (A);
- the locking device (D) when released from any position, engages with the bracket (A);
- markings are still readable.

Before use, find a completely safe position and carry out movements and suspension tests to check that this device is correctly positioned on the rope/cable.

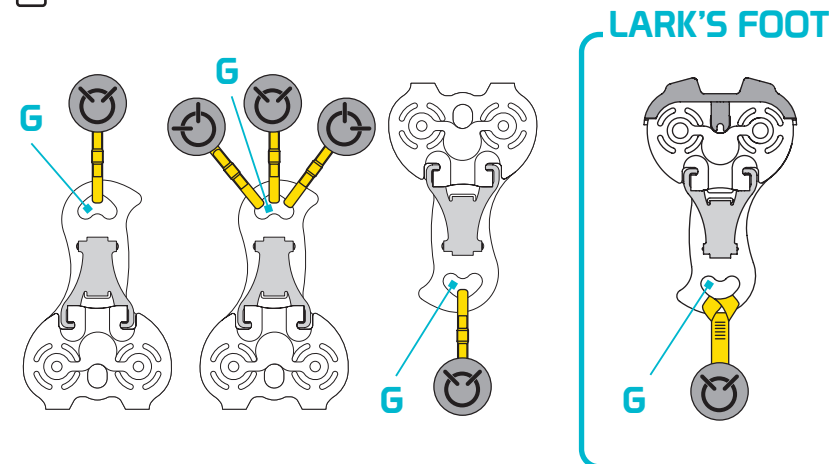
**Important:**

- This device by itself is not intended to limit the deceleration of the fall of the user, as defined in EN 15567-1, for this requirement it is essential to consider the whole ropes course system;
- During use check that:
  - The devices attached are correctly positioned;
  - This device is free to position itself in the proper direction for hauling the load;
  - The self-closing gate (D) closes automatically and completely, hooking itself to the flange (A).

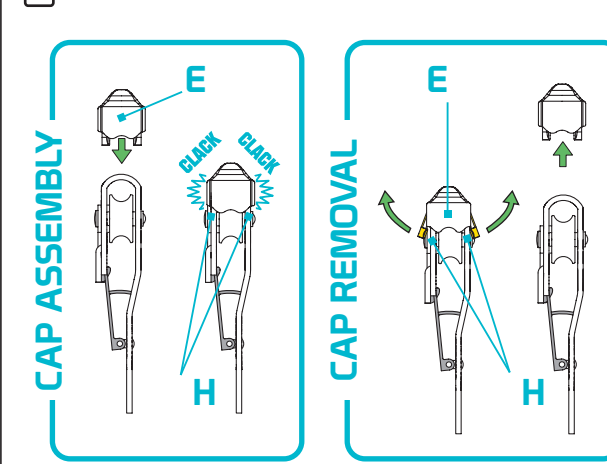
**Warning:**

- Beware of entrapment;
- The maximum speed allowed for this device is 15 m/s;
- It is forbidden the use on the Via Ferrata, unless specially designed;
- Use the protection (E) and wear personal protective equipment such as gloves and helmet to protect from burns, crushing and to avoid trapping fingers or hair between the rope/cable and the sheaves (B);
- The potential falling height must always be lower than 0.5 m unless the user is equipped with suitable certified devices (eg. Energy absorbers according to EN355) that protects from dynamic forces exerted on the user during the arrest of a fall.

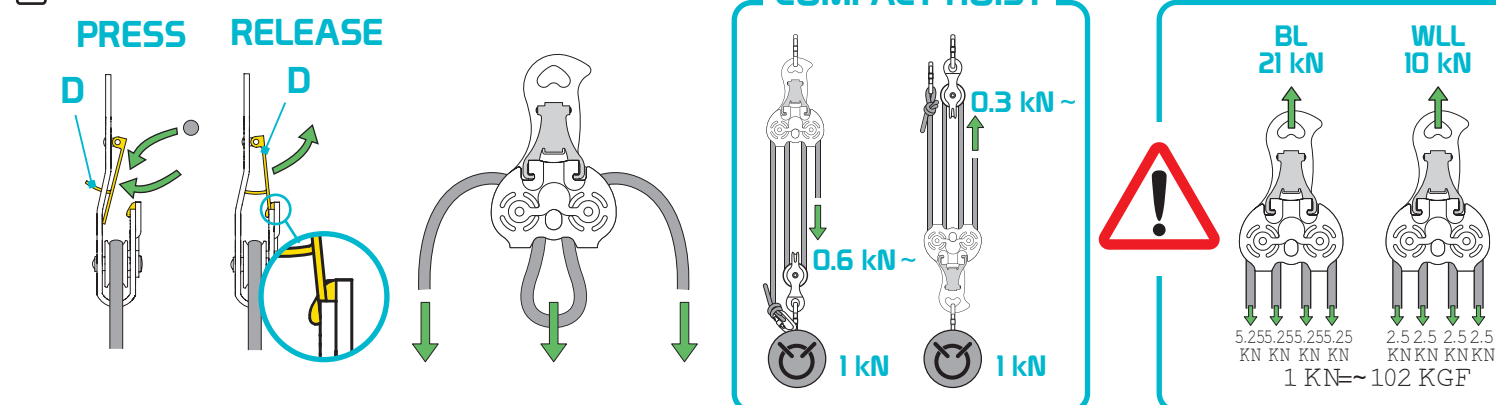
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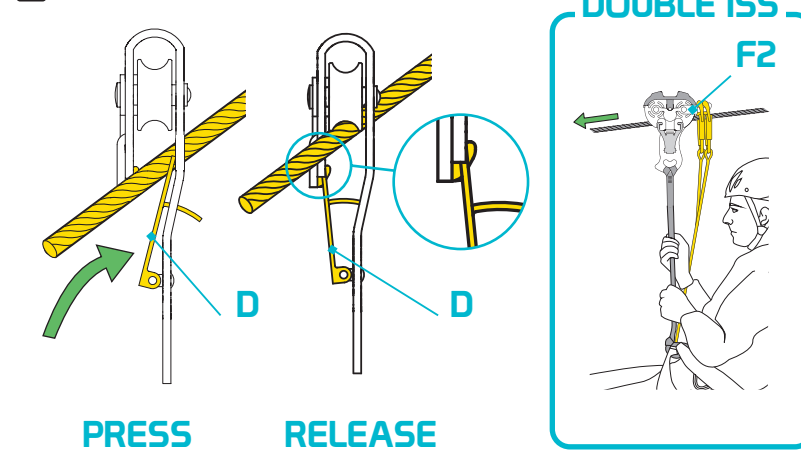
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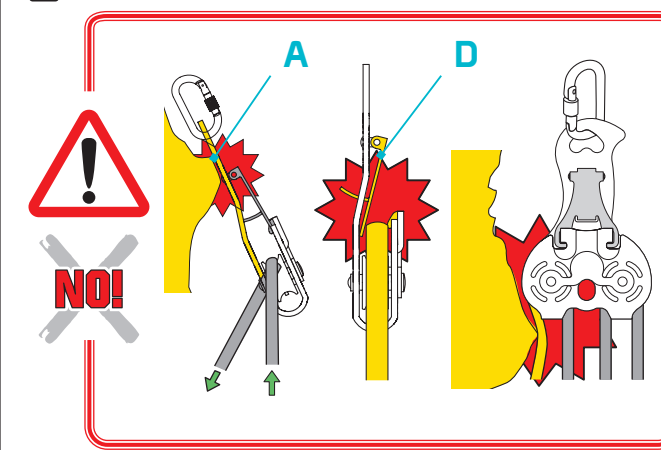
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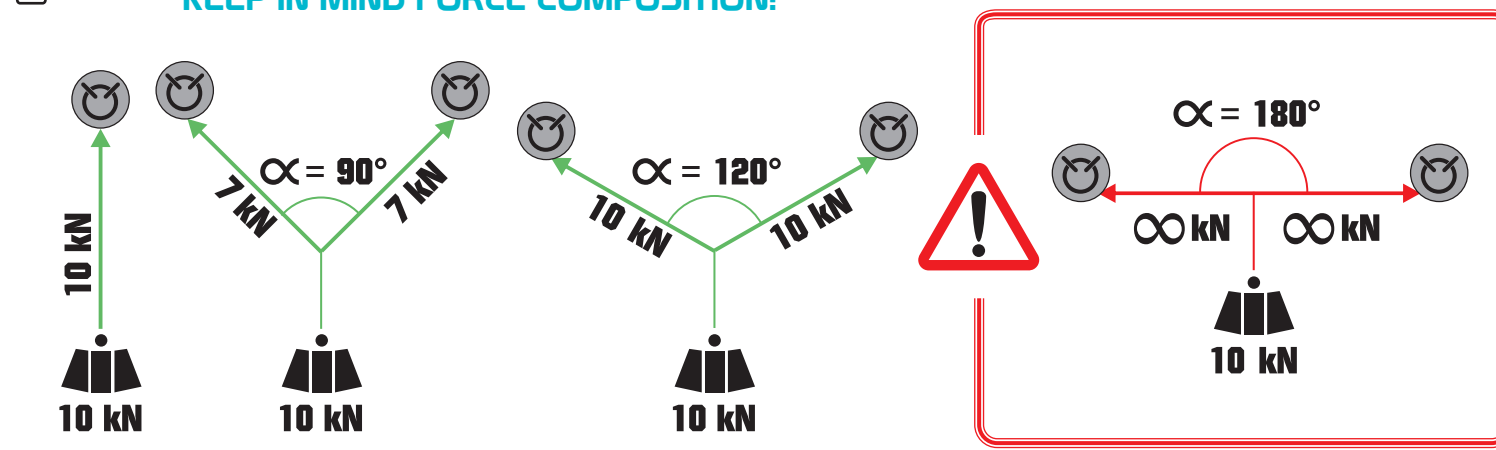
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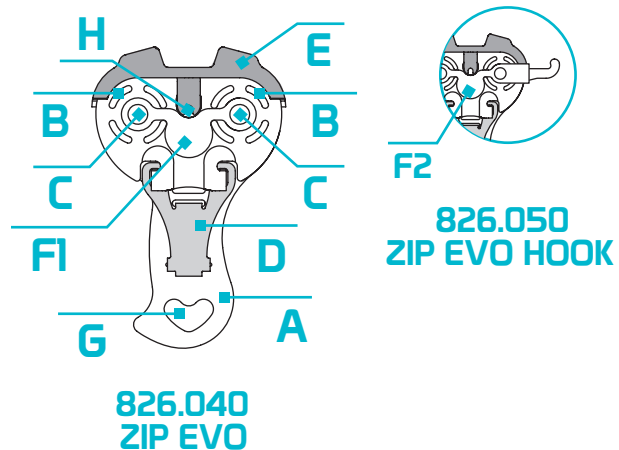


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**NOMENCLATURE • NOMENCLATURA**



**EN:** (A) Bracket in aluminium alloy, (B) Sheaves in mild steel with ball bearings, (C) Stainless steel pins, (D) Self closing gate in aluminium alloy, (E) Polyamide protection, (F1) Plate in mild steel, (F2) Connector-holder plate in mild steel, (G) Attachment point, (H) Auxiliary attachment hole.

**IT:** (A) Staffa in lega di alluminio, (B) Carrucola in acciaio dolce con cuscinetti a sfere, (C) Perni in acciaio inossidabile, (D) Leva a chiusura automatica in lega di alluminio, (E) Protezione in poliammide, (F1) Piastra in acciaio dolce, (F2) Piastra portaconnettore in acciaio dolce, (G) Punto di fissaggio, (H) Foro di fissaggio ausiliario.

**FR:** (A) Support en alliage d'aluminium, (B) Poulies en acier doux avec roulements à billes, (C) Axes en acier inoxydable, (D) Porte à fermeture automatique en alliage d'aluminium, (E) Protection en polyamide, (F1) Plaque en acier doux, (F2) Plaque porte-conecteur en acier doux, (G) Point de fixation, (H) Trou de fixation auxiliaire.

**DE:** (A) Halterung aus Aluminiumlegierung, (B) Umlenkrollen aus Baustahl mit Kugellagern, (C) Stifte aus Edelstahl, (D) Selbstschließender Schnapper aus Aluminiumlegierung, (E) Polyamid-Schutz, (F1) Platte aus Baustahl, (F2) Verbinder-Halterungsplatte aus Baustahl, (G) Befestigungspunkt, (H) Hilfsbefestigungsloch.

**ES:** (A) Soporte en aleación de aluminio, (B) Poleas en acero dulce con rodamientos de bolas, (C) Pasadores de acero inoxidable, (D) Puerta de cierre automático en aleación de aluminio, (E) Protección de poliamida, (F1) Placa en acero dulce, (F2) Placa portaconectores en acero dulce, (G) Punto de unión, (H) Orificio de fijación auxiliar.

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