VERTICAL by IGENA SYSTEM

VERTICAL LIFELINES

COMPLIANT WITH
EUROPEAN REGULATION
PPE 2016/425

igena
Lifelines and fall arrest anchors

COMPULSORY regulation since Abril 2019 EN 353.1: 2014 + A1: 2017

NEW REGULATION ON VERTICAL LIFELINES EN-353.1: 2014 + A1: 2017

The **current standard for permanent vertical lifelines EN 353-1:2014 + A1:2017** (ratified in April 2018), which complements the previous standard 353-1:2014 (ratified on 01.03.2015).

To understand the new standard for vertical lifelines, it is essential to remember that a permanent vertical cable line is considered PPE (Personal protective equipment) and it is governed at all times by the regulation for all PPE (2016/425) as well as its markings (standard 365-2004).

• The vertical lifeline **MUST HAVE a CE certificate**, issued by a notified laboratory with its corresponding CE type examination report (do not confuse with the declaration of conformity issued by the manufacturer). All manufacturers are obliged to pass an annual manufacturing quality control 11 B or equivalent.

• Regulation 2016/425 came into force on 21 April 2016, but will not be applicable until 21 April 2018, except some specific bodies, which will have been notified. Directive 89/686/EEC, in force for the last 25 years, will be repealed that same day. However, the PPE established by this Directive will still be able to be marketed **until 21 April 2019.**

• PPE can only be sold if it complies with this Regulation:

31.3.2016 ES Official journal of the European Union L 81/58

REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND THE COUNCIL
of 9 March 2016
regarding personal protective equipment and by which Directive 89/686/EEC of the Council is repealed

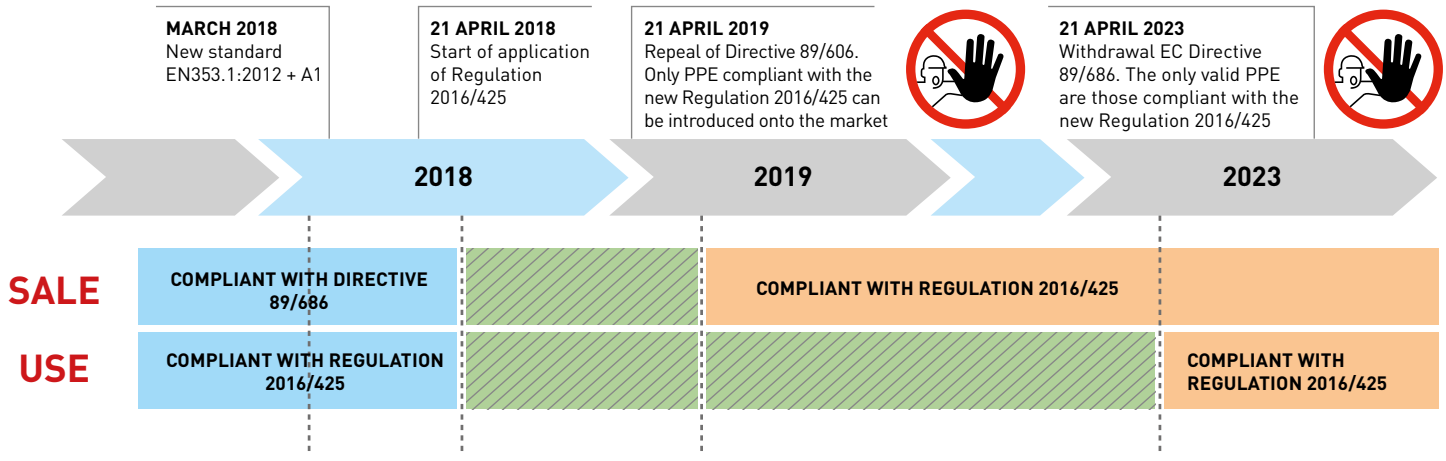
Article 4
Commercialization
PPE can only be commercialized if, with adequate maintenance conditions and used for its designed purpose, **it complies with this Regulation** and does not endanger the health or safety of people, domestic animals or property.

• Obtaining a new CE examination official report is currently **valid for 5 years and renewable**, until there is a new update. After this period as passed, IT EXPIRES, and a new one must be obtained. In previous versions of the standard, the CE certification was valid for an indefinite time. It was always possible to continue manufacturing a product with the old standard expired without the manufacturer having to adapt to subsequent new updates.

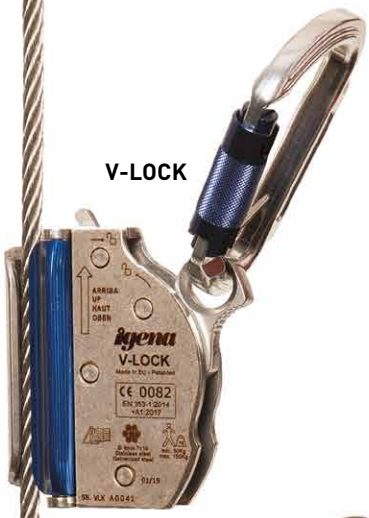
With the entry into force of 2016/425 **it is no longer allowed to manufacture or commercialise in the EEC**, as the previous CE examination official report outside current regulations is null and void.

• On 21 April 2023, when all the CE Type certificates that have not expired will lose their validity, the only legal PPE will be those regulated by the new Regulation (EU) 2016/425.

CHRONOLOGY OF THE NEW PPE REGULATION 2016/425



NEW V-LOCK & V-LOCK PRO FALL ARREST RUNNER MODEL



V-LOCK

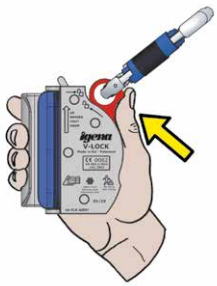
The sliding fall arrester (fall arrest runner) is the union between the cable and the user.

Reliability, robustness and ease of use are essential criteria when choosing a vertical lifeline.

IGENA presents **a new model of V-LOCK fall arrest runner** for their vertical lifelines, which adapt to all the user's needs; their main characteristics are:

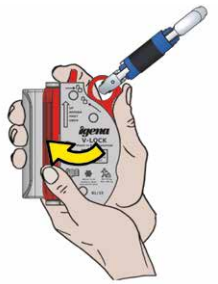
- **Own design and manufacturing**, in stainless steel (the whole body and mechanisms) and anodised aluminium (gate and carabiner). **Patented model EP 18209590.1**
- **Easy to handle and compact**, fits easily **to any point of the line**.
- Fall arrester appropriate for the **modern continuous passage system** by intermediate anchors (ref V 202 T) and with the popular "CRISBE" intermediate anchor (ref V 202 C).
- **Excellent behaviour** and greater smoothness **either moving up or down**, due to its weight/spring force ratio.
- Certified for users weighing 50 to **150 Kg**.
- Possibility of **personalization with the client's logo**.
- Modern ergonomic design, with **with easy-opening and intuitive system** of the gate (double action in compliance with standards).

V-LOCK PRO



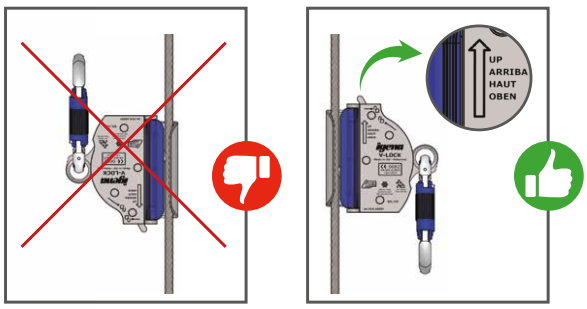
1. Move the main lever **up** until it makes contact.

2. Pull the upper trigger **backwards**.

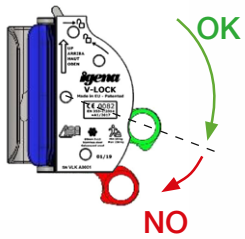


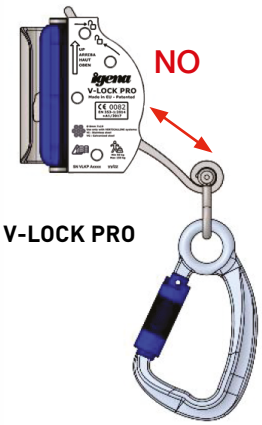
3. Rotate the gate and insert the cable into the fall arrester.

- **Built-in anti-rotation** positioning system (it can never be fitted the wrong way) and with a built-in carabiner.



V-LOCK



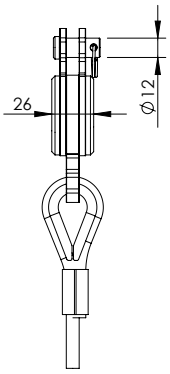


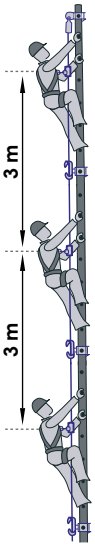
V-LOCK PRO

- **V-LOCK:** Fitted with a **built-in fall sensor**, that absorbs energy and indicates any overexertion of the runner, either due to the user falling or by manipulation or misuse.
- **V-LOCK PRO:** Equipped with an **integrated metal shock absorber**.
- They come in a convenient case for storage.

SHOCK ABSORBER: A new rotational energy absorbing system

V 300





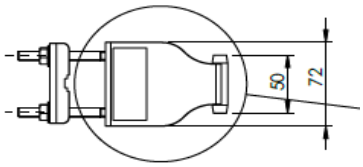
Own design and manufacture, entirely in stainless steel (body and mechanism) with PVC trim and an anodised aluminium plate. **Patented model EP18209587.7**

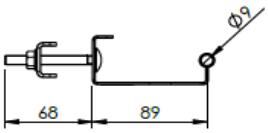
A new rotational energy absorbing system with **fall indicator** in case of anomalous overexertion on the line, with an indicator signalling that the absorber has been used.

- Apt for lines with up to **3 USERS AT THE SAME TIME**.
- Small size, without sharp edges or other elements that could harm the user when passing.
- Ensures **permanent protection of the line** in case of any manipulation, accident or misuse of the device.
- As this energy absorber is all metal, the V 300 (in contrast to other textile or foam energy absorbers on the market) **it does not have a pre-established expiry period**.
- Laser marking ensures total traceability and has an illustration for fitting.

INTERMEDIATE ANCHOR: Continuous passage automatic system

V 202 T





Own design and manufacture, entirely in stainless steel.

- Ensures that the cable will never be damaged by the wind making it hit the metal structure (the main cause of wear).
- Simple securing system to the rungs with clamps for square or circular sections up to Ø 40 mm.

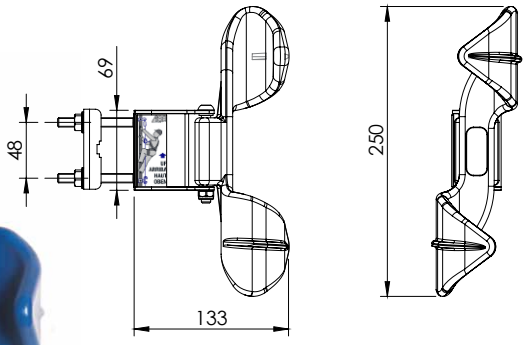
  M 8 stainless steel fasteners with locknuts DIN 6923 offering greater ease and speed of assembly and protection of the user as there are no sharp edges or other elements that could harm the user when passing.

- Enables the user to go up and down with total safety **bridging the intermediate points without having to stop or do anything**, always both hands keepings on the ladder (a requirement of standard EN 353.1 2014 + A1 2017).
- Separated 8 metres from each other (6 metres for outdoor use) stops the user becoming distanced from the ladder and causing the "bowing" effect on the line.
- The V 202 T intermediate piece allows the continuous passage of the V-LOCK fall arrest runner.
- Laser marking ensures total traceability and has an illustration for fitting.

Maximum reliability

INTERMEDIATE ANCHOR: Crisbe intermediate piece

V 202 C



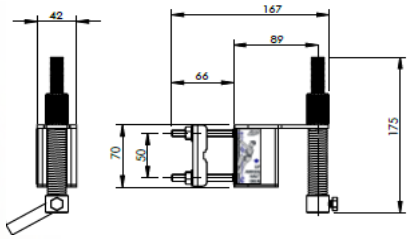
THE ONLY SYSTEM ON THE MARKET THAT COMBINES EASE OF USE AND COMPATIBILITY WITH ANY FALL ARREST RUNNER.

Additionally, the CRISBE V 202 C intermediate piece by IGENA offers:

- Own design and manufacture, with a robust section made of anodised aluminium stainless colour and mechanism made of stainless steel. Manufactured in high tenacity polyamide reinforced with fibreglass and U.V filter additive.
- Ensures that the cable will never be damaged by the wind making it hit the metal structure (main cause of wear).
- Enables the user to go up and down with total safety **bridging the intermediate points without having to stop or do anything**, always both hands keepings on the ladder (a requirement of standard EN 353.1 2014 + A1 2017).
- Separated 8 metres from each other (6 metres for outdoor use) stops the user becoming distanced from the ladder and causing the "bowing" effect on the line.
- The V 202 C "CRISBE" intermediate piece is the **only system on the market** that combines **ease of use and compatibility with any fall arrest runner**.
- Laser marking ensures total traceability and has an illustration for fitting.

ANCHOR TENSIONER: Optimum cable tension

V 402



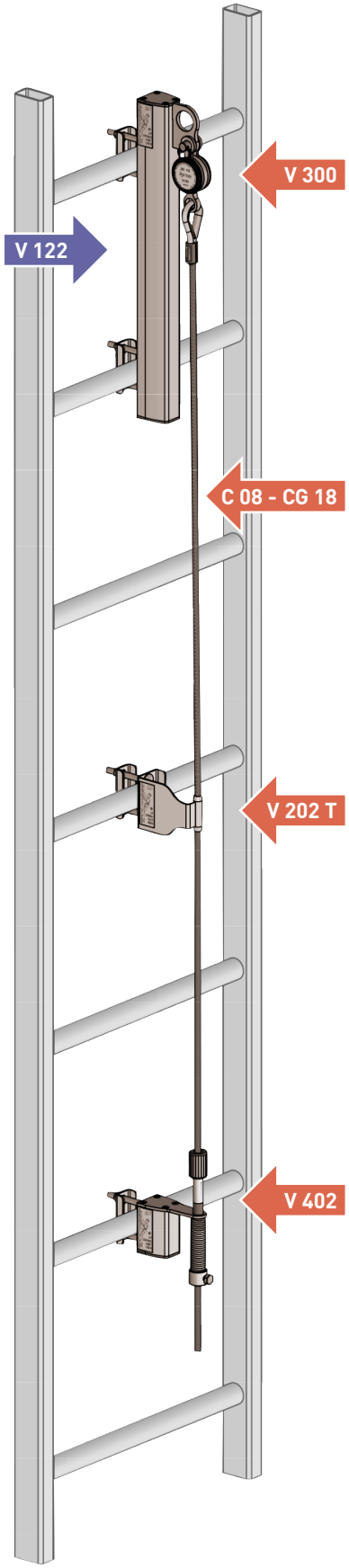
IGENA's constant innovation has led to the creation of the V 402 tensioner. Taking into account the point of view of the user and the installer.

Additionally, the V 402 tensioner system by IGENA offers:

- Own design and manufacture, with a robust section made of anodised aluminium stainless colour and mechanism made of stainless steel.
- Simple securing system to the rungs with clamps for square or circular sections up to Ø 40 mm. M 8 stainless steel fasteners with locknuts DIN 6923 easier to assemble and protecting the user as there are no sharp edges that could harm the user when passing.
- The V 402 tensioner **equipped with a** tensioner /regulator **spring** made of stainless steel. For **AUTO-TENSIONING** (in contrast to other manufacturers who fit rigid tensioners on the line without offering the possibility of adjusting the right tension of the line) protecting the line and avoiding the "bowing" effect, reducing the force on the upper and lower anchor points.
- **Optimum tension of the cable always guaranteed**, with no need to measure or control the tension. It will be sufficient to loosen the nuts a few turns to have the cable tense, with guaranteed tension of 23 - 30 daN.
- The V 402, tensioner with **a built-in indicator that the line is operational** in the same lower anchor of the line, indicates to the user that the line in being used correctly at all times and from the beginning of the ascent.

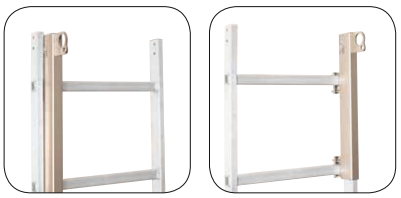
Total safety

STEP RANGE

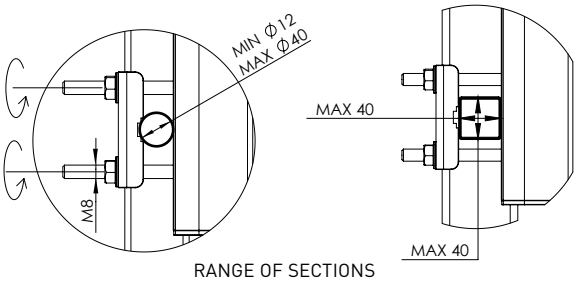


- **STAINLESS STEEL CABLE ref: VIC 2T**
- **GALVANISED CABLE ref: VGC 2T**

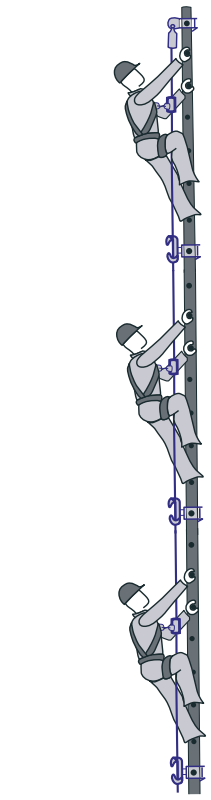
CENTRAL FITTING



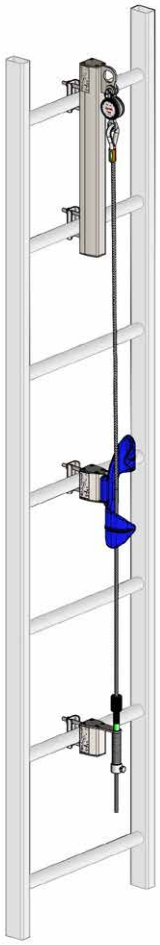
FITTING ON THE LEFT FITTING ON THE RIGHT



RANGE OF SECTIONS

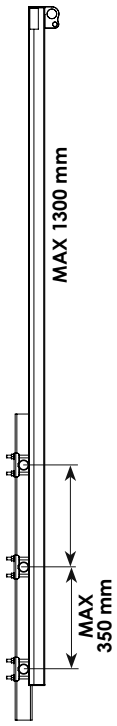


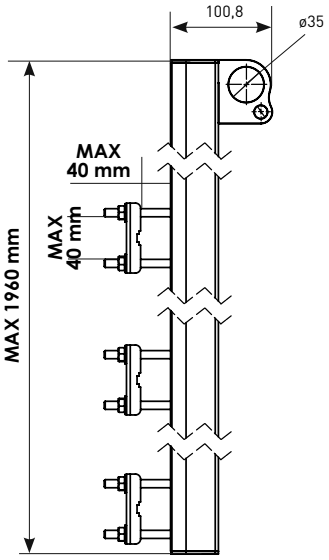
OPTIONAL: CRISBE INTERMEDIATE DEVICE

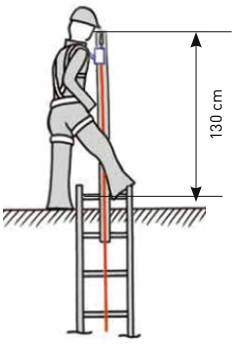


- **STAINLESS STEEL CABLE ref: VIC 2C**
- **GALVANISED CABLE ref: VGC 2C**

STEP RANGE WITH EXTENSION







Easy to leave/ enter the ladder in the access to the upper level

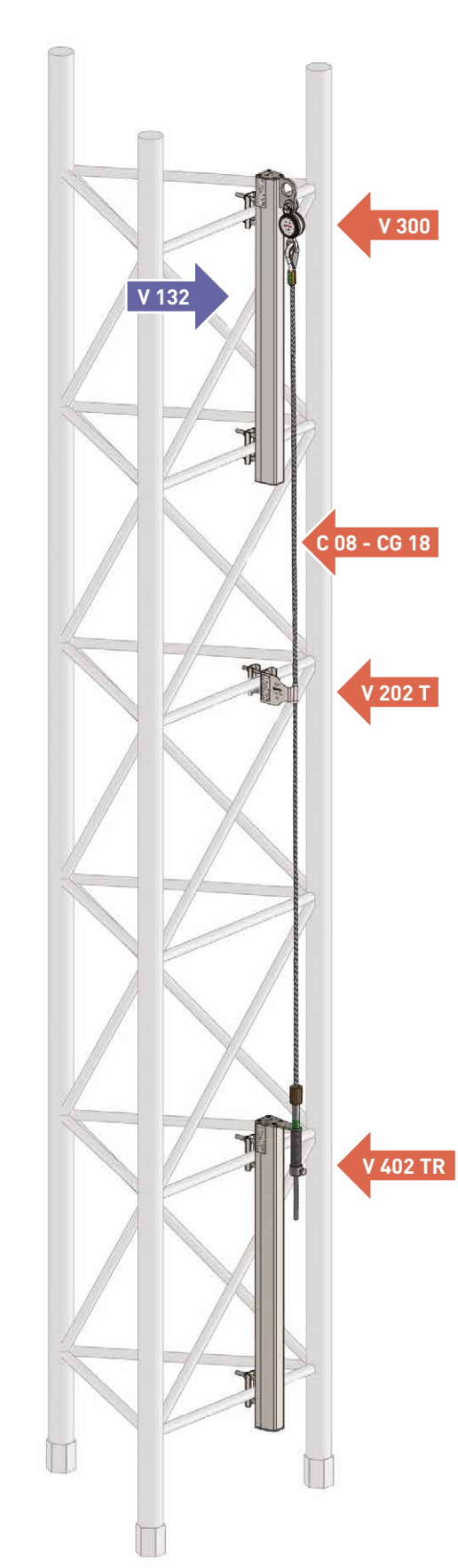
RANGE OF SECTIONS: diameter 12 - 40 mm. (Diagram page 8)

- **STAINLESS STEEL CABLE ref: VIA 2T**
- **GALVANISED CABLE ref: VGA 2T**

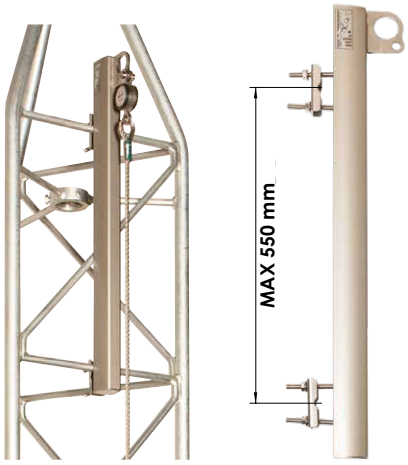
OPTIONAL: CRISBE INTERMEDIATE DEVICE

- **STAINLESS STEEL CABLE ref: VIA 2C**
- **GALVANISED CABLE ref: VGA 2C**

LATTICE TOWER RANGE

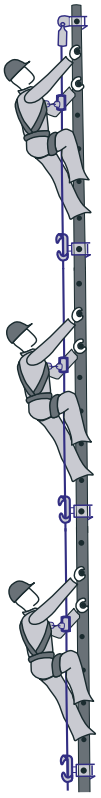


- **STAINLESS STEEL CABLE ref: VIT 2T**
- **GALVANISED CABLE ref: VGT 2T**



RANGE OF SECTIONS: diameter 12 - 40 mm.

ALTERNATIVE ANCHOR POINT



OPTIONAL: CRISBE INTERMEDIATE DEVICE

- **STAINLESS STEEL CABLE ref: VIC 2C**
- **GALVANISED CABLE ref: VGC 2C**

Versatile

ACCREDITATION AND DOCUMENTATION

Since it started, our brand is an example of the highest guarantee of safety, for its quality standards and rigorous manufacturing controls in the entire production process of our lifelines.

All our vertical lifeline anchoring devices comply with standard EN 795 A 2012 and technical instruction CEN/TS 16416 and our lifelines comply with the latest standard EN 353.1: 2014 + A1: 2017 issued by the notified laboratory APAVE CE 0082, as well as the new European regulation 2016/425.

To differentiate an authentic IGENA vertical lifeline from any other vertical cable secured to a structure, the necessary accreditation documentation is listed below:

All **lifelines** have **a serial number** that identifies at all times its components and enables traceability during its entire service life. This serial number is indicated on the following parts (see images):

Eye splice in V 300

Signal plate S-15

Technical dossier DC 27

As well as including this serial number in all the documentation (invoice, bill, etc.), when supplying the materials, the following information will be provided:

1) The number of the lifeline on the outside of each box.

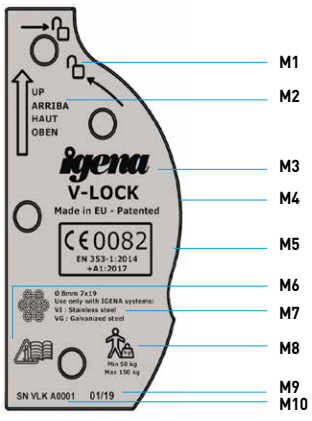
2) Diagram and detailed list of material that conforms each numbered lifeline (Packing List).

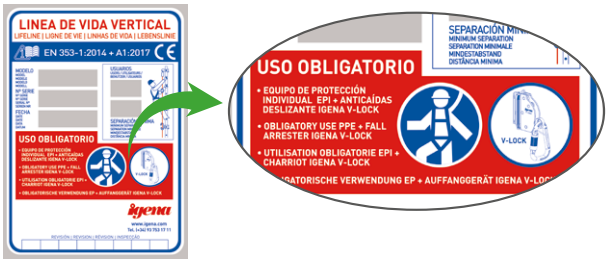
3) In the manufacturer's instructions (technical dossier of the line), which includes:

a) Copy of test certifications
b) Assembly sheet (in the technical dossier to be filled in by installer)
c) Revision sheets (see technical dossier)

SIGNALLING AND MARKING

The sliding fall arresters (fall arrest runners) are delivered with their corresponding documentation in the bag and are marked with their serial number personalised and signalling according to regulations:





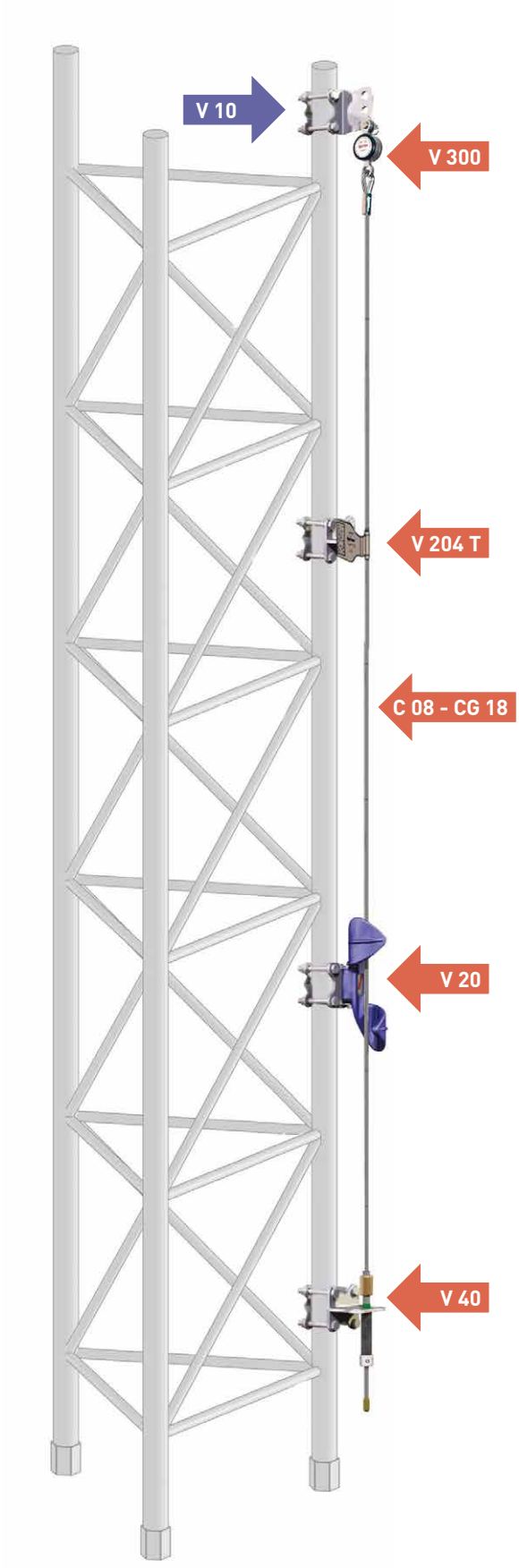
MEANING OF MARKINGS

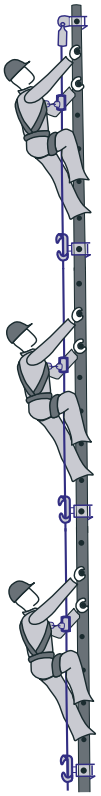
M1 Indication of gate unlocked - **M2** Correct orientation (Arrow pointing upwards) - **M3** Manufacturer - **M4** Model - **M5** Notified laboratory responsible for production control - **M6** Read instructions before using - **M7** Type of cable on which the product is mounted - **M8** Minimum and maximum weight, including materials - **M9** Month and year of manufacture - **M10** Nº Serial number

V 202 T marking and signalling, details

I+D

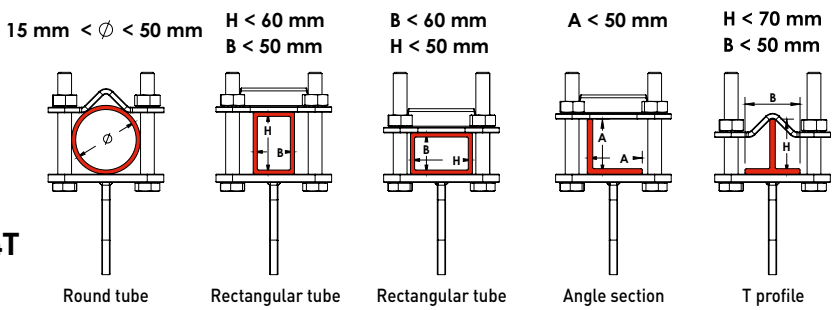
STRUTS RANGE - Securing 4 nuts





- **STAINLESS STEEL CABLE ref: VIL 4T**
- **GALVANISED CABLE ref: VGL 4T**

Range of compatible sections and tubes

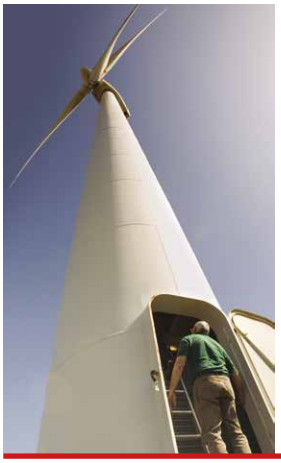


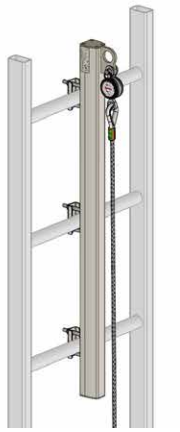
SPECIAL PIECES

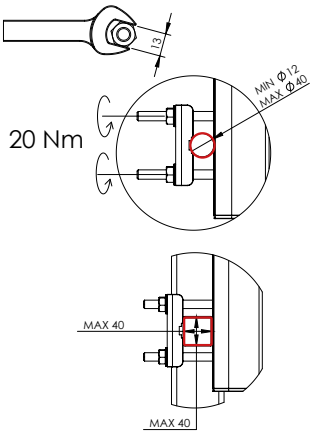
Upper anchoring point for steps IN WIND TURBINES

V 133

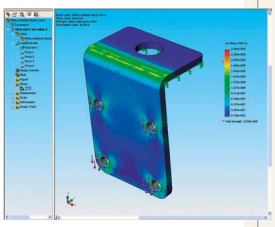
Compliant with standard EN 795 A 2012 for 3 users and EN-50803/2005.

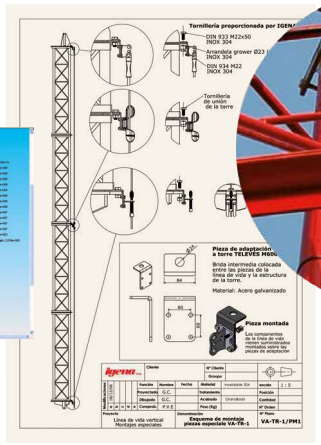






TELEVES 600 towers anchor





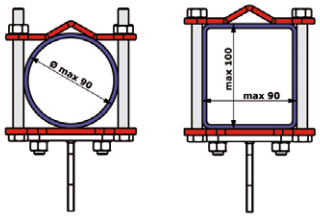
VA-TR-1

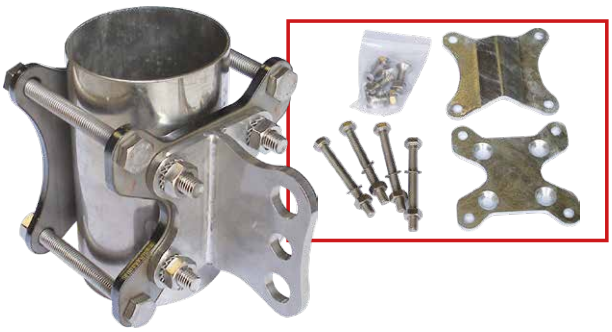
Special piece for adapting cross-braced towers

VS-90

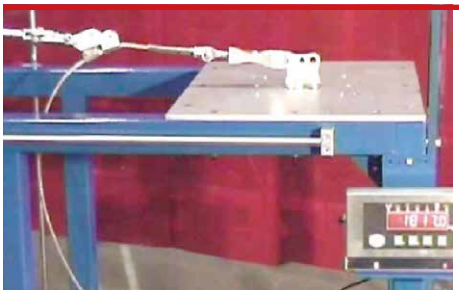
FLANGE VS-90 galvanised

When the fitter has a structure of special dimensions, the VS-90 flange is available, made of galvanised steel.





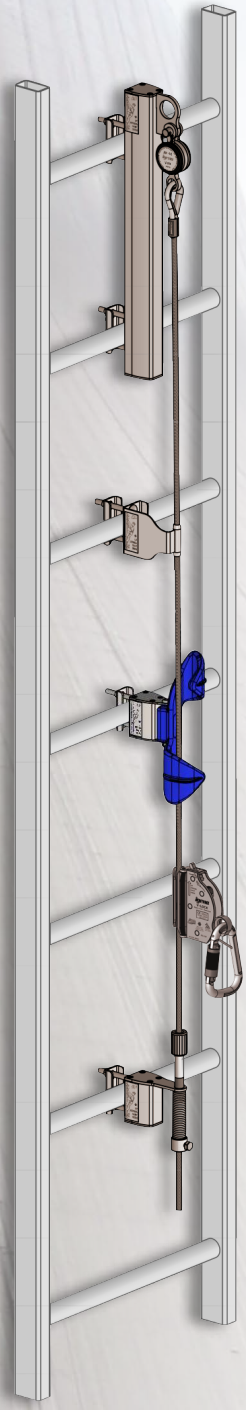
This accessory will allow the pieces of the lifeline to be fitted to tubes of up to 90 mm in diameter.



Igena, a manufacturer at your service, has, in its production plant, **its own mechanical workshop**, where accessories and special made to measure parts can be made quickly.

To verify the new designs and prototypes, our **quality department** has static and dynamic test rigs.

3S imple afe olid



SIMPLE

- Assembled with a single tool (13 Metric 8 socket).
- Orientation indicator.
- Auto-tensioning tensioner.
- Quick and easy to install.
- Compatibility with numerous fall arrest systems.
- Anchors, adjustable distance between steps.

SAFE

- Up to 3 users.
- Passage past intermediate anchors with no manual intervention.
- Permanent protection of the line.
- Designed without sharp edges to protect the user.
- Anti-rotation system.
- Modern automatic continuous passage. Total protection of the cable. FAST system.

SOLID

- Entirely metal energy absorber (without a pre-established expiry period).
- Cable auto-tensioning system.
- Entirely metal fall arrester with a built-in fall indicator system.
- Users weighing up to 150 kg.
- Resistance >2500 Kgf.

Standard: **EN 353.1: 2014 + A1: 2017**

igena seguridad

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