

# Instruction manual for fall arrest & rescue harness type

## V33 RESCUE, V33 PHARMA, V35 MULTIACCESS certified according to EN 361 & EN 1497

### V33 Rescue



### V33 Pharma



### V35 Multiaccess



Thank you for choosing a VERTIQUAL® harness! You have purchased a high quality product that will reliably protect you and will be your companion for a long time when working at heights and depths.

This manual must be read and understood before using the product! This product will be used with other equipment (components) thus forming a system for working at heights. Please refer to the instruction manual of each component in your system for compatibility and correct use! Following these instructions accordingly is essential for your safety. Failure to do so can result in serious or even fatal accidents! Keep these instructions together with the product, accessible to all users, so they can consult them whenever is needed!

**WARNING!** These instructions are a basic comprehensive guide to the safe use of the purchased equipment. They contain general information about the product, intended to help the user, but cannot cover all the situations that may occur in the daily activities and cannot in any case replace the specialized training courses for safety at heights. This PPE against falls from heights can only be used by well-trained users, who are familiar with the relevant legislation and who have successfully completed a special safety training course for working at heights.

**WARNING!** For works with risk of falling from heights or in depths, a risk assessment must be carried out in advance in accordance with current regulations and legal provisions (EN standards or specific national rules) that will provide adequate measures for safety and rescue!

**WARNING!** Instructions for use are updated when technical or legislative changes occur. The latest version of the instructions overwrites previous versions and is the only valid version. Please make sure you follow the instructions of the most recent version. You can download the most recent instructions from our website [www.vertiqualsafety.com](http://www.vertiqualsafety.com) by accessing the section of each product. For help or additional questions, please contact us at [office@vertiqualsafety.com](mailto:office@vertiqualsafety.com) or Tel. (+40) 0365/882143.

**WARNING!** The user must be medically fit and capable to ensure his own safety and act accordingly in possible emergency situations! Seek medical approval according to the national legislation in force!

**WARNING!** If the product is re-sold outside the original country of destination, the reseller must provide these instructions manual in the language of the country where the product will be used.

**FIELD OF USE:** Along with other tested and certified components, the full body harnesses type **V33 RESCUE**, **V33 PHARMA** and **V35 MULTIACCESS** will be used in fall arrest systems (EN 361) and in rescue systems (EN 1497). The purpose of a fall arrest system is to stop the free fall of the user, absorbing most of the shock and distributing the remaining force evenly, while holding the users body in a proper position until he or she is rescued. The use in rescue systems will be done when the user needs to evacuate the workplace (will be lifted/lowered to a safe area).

The product must be used exclusively as a PPEaF (Personal Protective Equipment against Fall), in usual environments with temperatures between -30°C and +50°C, without potentially explosive atmospheres, far away from flames, sparks or hot metal splash. Avoid contact with sharp edges, electricity, chemicals, corrosive solutions and substances, excessive heat, oils, paints or any other contaminants. The structures used for anchoring have to meet the requirements of EN 795-2012, must have NO sharp edges and must be capable to withstand minimum 12 kN. The anchor point must be located as high as possible above the user and as close as possible to the vertical axis of the user's position, thus reducing the fall distance and prevent pendulum accidents. The minimum free space below the user (fall clearance) must be ensured to prevent hitting the ground or any obstacles, while the fall is arrested.

**DESCRIPTION:** **V33 RESCUE**, **V33 PHARMA** and **V35 MULTIACCESS** harnesses are made of 45 mm wide, high tensile webbings. The anchor rings and the buckles are made of high tensile steel or high tensile aluminium alloy. The buckles used for opening/closing the straps can have manual locking (classic type) or automatic locking (click type). The fall arrest attachment points of a harness are always marked with „A“ or „A/2“. All models are equipped with the DORSAL RING that is marked with „A“. The FRONTAL RINGS for V33 RESCUE and V33 PHARMA are located in the chest area and are marked with „A“. For V35 MULTIACCESS the FRONTAL RINGS are marked with „A/2“ and need to be connected simultaneously. V33 RESCUE and V33 PHARMA are equipped with a shoulder rescue loop that will be used only for rescue purposes when needed. The rescue line will be connected to this rescue loop using an EN 362 connector. V35 MULTIACCESS is equipped with two rescue loops on the shoulders and the FRONTAL RINGS located in the chest area can be used for rescue purposes too. To connect to V35 rescue loops/rings a certified spreader must be used. V35 is equipped with paddings for the leg straps, shoulder straps and a lumbar padding for optimum comfort.

These harnesses can be used by persons weighing up to 150 kg (fully equipped). In this case the shock absorbing lanyard used (or other fall arrest device) must be approved for 150 kg persons. The energy absorber must also be capable to offer the same performance and to reduce the shock force below 6kN, in case of a fall, while working with higher user weight than 100kg!

**FALL ARREST attachment points (EN 361):****FRONTAL RING**

- V33 Rescue
- V33 Pharma

**EN 361****FRONTAL RINGS**

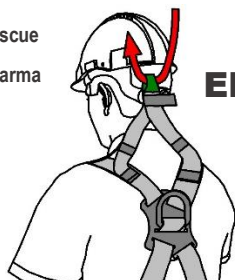
- V35 Multiaccess

**EN 361****DORSAL RING**

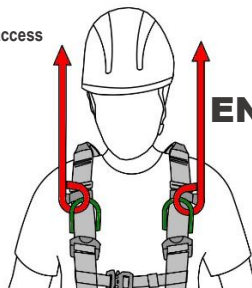
- V33 Rescue
- V33 Pharma
- V35 Multiaccess

**EN 361****RESCUE attachment points (EN 1497):****RESCUE LOOP**

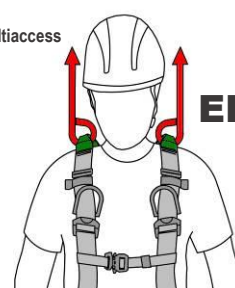
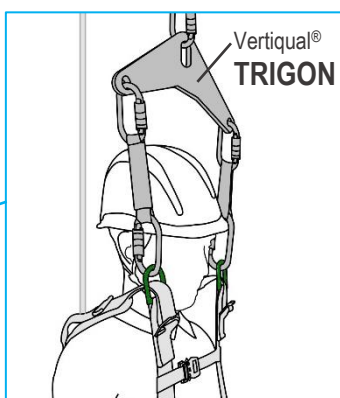
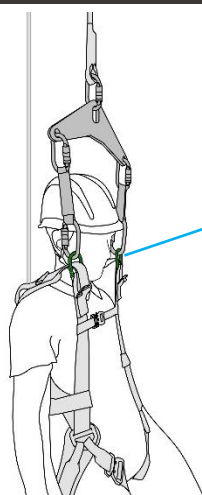
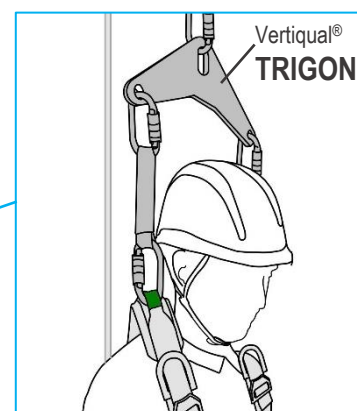
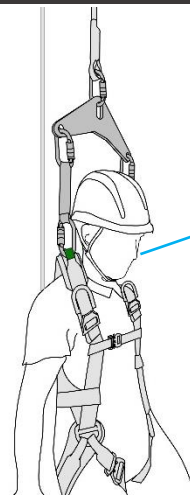
- V33 Rescue
- V33 Pharma

**EN 1497****RESCUE RINGS**

- V35 Multiaccess

**EN 1497****RESCUE LOOPS**

- V35 Multiaccess

**EN 1497****V35 MULTIACCES: Examples of use with spreader****Connected to the EN 361 & EN 1497 FRONTAL RINGS (chest)****Connected to the EN 1497 RESCUE LOOPS (shoulders)**

The rings and textile loops marked with “A” or „A/2” are the only attachment points that can be used for arresting a fall! Only to these points it is allowed to connect one of the following fall arrest equipment:

- Retractable type fall arresters (EN 360)
- Guided type fall arresters including a flexible anchor line (EN 353-2)
- Guided type fall arresters including a rigid anchor line (EN 353-1)
- Descent and rescue devices (EN 341 and EN 1496)
- Energy absorbing lanyards (EN 354 + EN 355)

All VERTIQUAL® harnesses have a minimum breaking load of 15 kN. These harnesses were tested additionally with a dummy weighing 150 kg, being subjected to greater loads than required by the actual EN 361 standard. **Thus, these harnesses can be used by persons weighing up to 150 kg** (including equipment). In this case the shock absorbing lanyard used (or other fall arrest device) must be approved for higher user weight of 150 kg. The energy absorber must also be capable to offer the same performance and to reduce the shock force below 6 kN, in case of a fall, while working with higher user weight. For this purpose, we recommend using shock absorbing lanyards of the MAGNUM series (tested and certified for users between 50-150 kg). We recommend the use of VERTIQUAL® harnesses together with other VERTIQUAL® manufactured components, to have guaranteed 100% compatibility of your equipment!

**WARNING!** Before use, the integrity and compatibility of the equipment must be checked. If damage is identified, the harness must be immediately withdrawn from use! If there is any doubt regarding the condition of the equipment it must be sent to the manufacturer or to an authorised representative of the manufacturer for a professional evaluation.

**The harness must be immediately removed from service if:**

1. The marking/label is missing or is unreadable.
2. Damage has been identified (incisions, worn seams, discoloration, hardened or thinned areas, burns, rusted or deformed metal parts, defective buckles) or if any abnormalities of the parts or structure have been found.
3. Contact with paints or unknown chemicals had occurred (irreversible contaminations).
4. The harness was involved in a fall arrest or had been subjected to heavy loading.
5. The integrity of the equipment is questionable and the inspection log is incomplete or missing.
6. The equipment was in service longer than **10 years**.

**FALL INDICATORS (OPTIONAL)**

**DANGER! Do NOT use the harness!  
Remove from service immediately!**

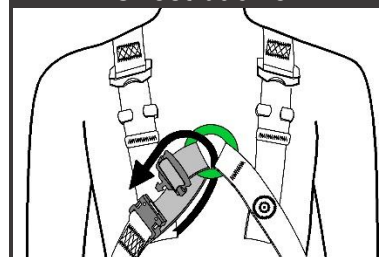
**PARKING ELEMENTS (OPTIONAL)**

When using forked lanyards, having one string connected to the anchor point, connect the second, unused string, only to approved lanyard parking elements on your harness! (e.g. a plastic ring).

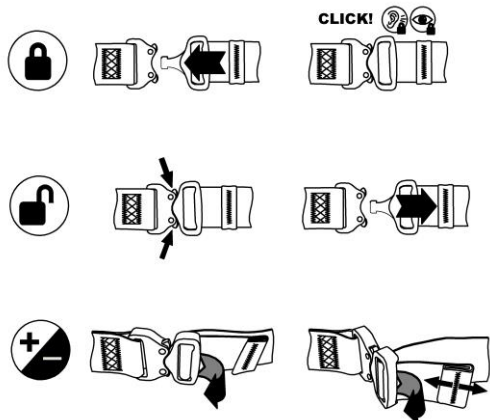
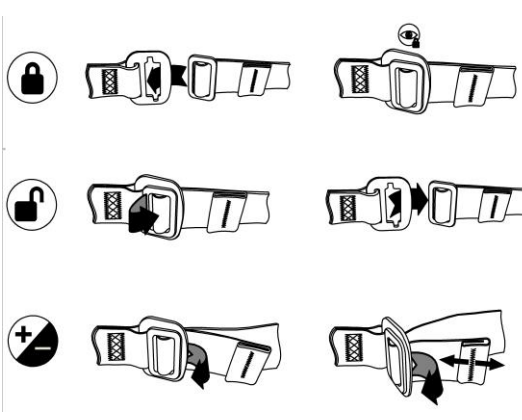
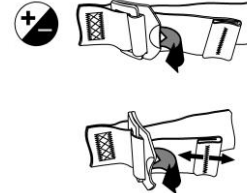
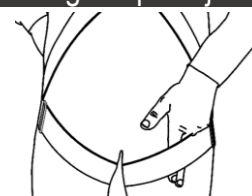
In case of fall, a lanyard parking element will break easily, allowing correct deployment of the absorber!

**Fitting the harness:**

1. Pick up the harness by the dorsal ring and swing it gently up and down to reposition the straps and to ease untangling.
2. Open all buckles then put the harness over the shoulders (like dressing a vest).
3. Ensure there are no twisted straps then, one by one, close the chest, waist and legs buckles.
4. In case of V33 models, the chest buckle must be closed through the chest ring (check the images below).
5. Each leg strap will be passed between the legs, from back to front and the buckles will be closed with their corresponding counterpart.
6. Check if the straps are positioned correctly and adjust the length for each one.
7. Ensure that all buckles are closed and locked, that there are no twisted straps and all free ends of the straps are held using the elastic rings or rubber sliders provided on the harness.
8. A harness fitted correctly has the dorsal ring located in the middle, between the shoulder blades and the frontal ring / frontal loops located in the lower half of the sternum.
9. The straps will be tightened so that one or two fingers can slide in between the body and the strap (check the images below). If the adjustment is too tight the harness will be uncomfortable and the user will have difficulties working. Insufficiently adjusted or loose straps can lead to serious or even fatal accidents!
10. Before working, it is recommended to perform a quick hanging test from a small and safe height, in order to check the adjustments and the comfort of the harness.

**Chest buckle**

V33 Rescue, V33 Pharma

**Automatic (CLICK) buckles****Manual (CLASSIC) buckles****Adjuster buckle****Checking straps adjustment**

**WARNING!** This product is developed as a Personal Protective Equipment against Fall (PPEaF). Bringing modifications to it or assigning other uses are strictly forbidden! Each user shall use his own PPEaF as well as his own rescue equipment. The user must know the performances and limitations of his equipment! In case of uncertainty regarding the equipment seek advice from the manufacturer or distributor.

**RESCUE!** A rescue plan must be made before starting the work at heights or depths! It is mandatory to setup and know the specific rescue plan for every situation and to have designated personnel and appropriate means of intervention!



**The SERVICE LIFE** \* of PPE against falls, made of textile materials is 6-8 years under normal conditions, but a **maximum of 10 years** \* from the date of first use. The date of the first use must be noted in the logbook, otherwise the date of manufacture is considered as the date of the first use. **The storage** of new, unused products under optimal conditions (darkness, dryness, original packaging, constant temperature, without chemical vapors, etc.) should not exceed **2 years**. \* PPE that belongs to a single user, has not been used excessively and not often, has been subjected to regular checks by experts, has been found to be "safe" and recorded in the test book, has a complete product history, has not been involved in a fall, is carefully treated and cared for, have been stored in accordance with regulations, have not come into contact with oils, fats or aggressive chemicals, (attention - incomplete list) can remain in use for up to 10 years. Intensive use, heavy and demanding working conditions, incorrect application, incorrect maintenance and care can greatly reduce the service life of the equipment. Certain events, such as falls, high exposure to heat, exposure to corrosive chemicals, can limit the use of your equipment to a single time. A generally valid, binding statement about the duration of use of textile PPE cannot be made, as this depends on a large number of factors such as UV light exposure, working conditions, contact with various substances, etc. The service life of the equipment ends when one of the cases mentioned in the previous chapter occurs or when the inspector / certified expert decides this on the basis of other facts. The theoretical total service life of textile PPE against falls (Storage time + Service life) is limited to a maximum of 12 years from the date of manufacture.

## STORAGE, MAINTENANCE, TRANSPORT

The equipment should be stored in a dry, cool and well-ventilated room, if possible, in its original packaging. While in storage, this PPEaF must be protected from UV radiation, solar radiation, heat, sparks, incandescent metal splash, electricity, chemicals, sharp objects, heat sources, dust, cement, oils and greases or any kind of contaminants. Buckles and metal parts can be cleaned using a soft cloth or using compressed air. If necessary, the textile parts can be cleaned using warm water (30°C) then rinsed. Drying the wet equipment will be made by hanging it in well-ventilated room away from any heat source. When fully dried, the equipment can be stored accordingly in its packaging (bag or box). The use of disinfectants is forbidden, as long term effects of various types of disinfectants and concentrations are not known! Transport of the equipment must be made in its protective bag or box, away from any factor that could contaminate or inflict damage.

**MARKING:** all VERTIQUAL® PPEaF are fitted with a label which contains the following elements and essential information: name of the manufacturer [Vertiqua Engineering srl], name of the model and version [E.g. **V35 MULTIACCESS**], size [e.g. **L-XL**], manufacturing date [**mm/yyyy**], the standards/norms the product complies to [**EN 361:2002, EN 1497:2007**], European **CE** marking with identification number of the notified body **0000**, allowed user weight for the harness [e.g. **150 kg**], international symbol/icon for reading the instructions before use and the product's serial number [**000000**]. The label must be always present and readable!

## PERIODIC INSPECTIONS AND CHECKS

The user must perform a visual and functional inspection of his equipment before and after each use! During use, it is important to monitor your equipment in order to identify possible damages inflicted in use, without being aware of it. The equipment must be inspected **at least once every 12 months** or more often if required, depending on the working conditions and compulsory after every incident it has been involved in. Inspections can be carried out only by the manufacturer or by an authorised inspections center. **If the periodic inspections were not performed at least once every 12 months, were carried out by unqualified persons, or without strictly respecting the manufacturers instructions, the warranty is lost and the manufacturer declines any responsibility related to the equipment!**

**Inspection Log!** Every PPEaF is delivered with an Inspection Log. This document must be kept safely and sent along with the product for every inspection.

The Log (table) contains important data regarding your equipment. The date, signature of the inspector and the results are also recorded. The **date of first use** must be written in the Inspection Log by the user!

**Repairs** or any other modifications can be performed only by the manufacturer! Any repairs, modifications or additions (even minor ones) performed by anyone else are strictly forbidden, lead to the loss of the manufacturers guarantee and any responsibility related to this product!

## WARRANTY AND LIABILITY!

The manufacturer offers a **24 month** warranty for this PPEaF from the date of first use. The user has the obligation to write the date of first use in the Inspection Log. If the date of first use was not filled in, the warranty period will be calculated from the manufacturing date. The warranty is applicable only for material or manufacturing defects! Damage resulting from normal wear and tear, corrosion, poor maintenance (or no maintenance at all), those resulted from carelessness, accidents, fall arrest, unauthorised repairs or modifications, wrong use of this PPEaF or any other reasons are NOT covered by the warranty!

The warranty does NOT cover the springs of the carabiners and automatic buckles as these can be damaged due to inadequate storage or improper use.

Warranty claims only apply to the product. All claims by the user or any other party for the direct, indirect or any consequential damages resulting from the use of this PPEaF are excluded from guarantee and liability assumptions. Any claims in this regard are hereby expressly rejected.

The user must be informed regarding the dangers of work at heights and depths. He should be aware of the risks and he has to be aware that he is the only responsible for eventual damage, accidents or even death which may result from the use of this equipment. If the user is unable to do so or if he does not have the competence to do so, he cannot use this PPEaF.

VERTIQUAL Engineering SRL herewith rejects any liability claims for direct, indirect, accidental or consequential damages resulting from the use of this PPEaF (Personal Protective Equipment against Fall).

This products comply with the **European PPE Regulation (425/2016)** and the harmonized standards **EN 361:2002** and **EN 1497:2007**. **The EU type examination** was carried out by **NB 1019** (VVUÚ, a.s. Address: Pikartská 1337/7, 716 07 Ostrava-Radvanice, Czech Republic) for model V35 and **NB 2756** (INCDPM - The National Research and Development Institute for Occupational Safety-Bucharest) for models V33 Rescue and V33 Pharma. The production control for all models is carried out by NB 2756 (INCDPM - The National Research and Development Institute for Occupational Safety-Bucharest).

The **EU Declaration of Conformity** can be downloaded from our website [www.vertiqualsafety.com](http://www.vertiqualsafety.com) by accessing the product's dedicated section.