



Instruction Manual for CARABINERS/SNAP HOOKS acc. to EN 362:2004 Classes A/B/T and SCREW LINK acc. to EN 362:2004 Class Q



KANGRI EN 362/2004/T



	Ötel
	25 kN
	Auto Lock
	238 g
	18 mm
	130/68 mm

Art. nr. 23-0022-18-20-62
CE 2777

QUADRO EN 362/2004/T



	Aliaj aluminiu
	40 kN
	Auto Lock
	126 g
	25 mm
	141/79 mm

Art. nr. 23-0232-22-15-62
CE 2777

COLORADO EN 362/2004/T (ANSI Z359.12 & CSA Z259.12)



	Ötel
	45 kN
	22 kN
	Tri Lock
	314 g
	20 mm
	139/77 mm

Art. nr. 23-0230-21-20-62
CE 0321

BÄRLI EN 362/2004/A



	Aliaj aluminiu
	23 kN
	Auto Lock
	482 g
	60 mm
	235/120 mm

Art. nr. 23-0526-60-91-62
CE 0321

CONDOR EN 362/2004/T



	Aliaj aluminiu
	22 kN
	Screw
	199 g
	18 mm
	136/81 mm

Art. nr. 23-0121-20-93-37
CE 1805

BLACKBURN EN 362/2004/T



	Aliaj aluminiu
	28 kN
	Tri Lock
	109 g
	22 mm
	140/79 mm

Art. nr. 23-0329-22-93-62
CE 2777

BROOKS EN 362/2004/A



	Ötel
	23 kN
	Auto Lock
	514 g
	50 mm
	217/110 mm

Art. nr. 23-0026-50-20-62
CE 0321

FUJI SAN EN 362/2004/B



	Aliaj aluminiu
	25 kN
	Auto Lock
	475 g
	60 mm
	237/115 mm

Art. nr. 23-0426-60-91-62
CE 2777

CHIMBORAZO EN 362/2004/A (ANSI Z359.12 & CSA Z259.12)



	Ötel
	50 kN
	16 kN
	Auto Lock
	775 g
	60 mm
	236/125 mm

Art. nr. 23-0325-60-20-62
CE 0321

SAJAMA EN 362/2004/A



	Ötel
	23 kN
	Auto Lock
	861 g
	85 mm
	332/150 mm

Art. nr. 23-0330-85-11-62
CE 0321

MATTERHORN EN 362/2004/A



	Aliaj aluminiu
	23 kN
	Auto Lock
	900 g
	110 mm
	352/180 mm

Art. nr. 23-0626-11-91-62
CE 0321

ANNAPURNA EN 362/2004/B



	Ötel
	25 kN
	7 kN
	7 kN
	Screw
	165 g
	18 mm
	110/58 mm

Art. nr. 23-0223-18-11-40
CE 2777

MAKALU EN 362/2004/B



	Ötel
	25 kN
	7 kN
	7 kN
	Twist Lock
	196 g
	19 mm
	110/58 mm

Art. nr. 23-0224-18-11-40
CE 2777

COOK EN 362/2004/B (EN 12275 UIAA)



	Ötel
	30 kN
	16 kN
	Screw
	179 g
	17 mm
	107/57 mm

Art. nr. 23-0423-17-20-62
CE 0321

KEA EN 362/2004/B (EN 12275 UIAA)



	Ötel
	30 kN
	16 kN
	8 kN
	Tri Lock
	198 g
	17 mm
	107/57 mm

Art. nr. 23-0424-17-20-62
CE 0321

SÄNTIS EN 362/2004/B (EN 12275 UIAA)



	Aliaj aluminiu
	36 kN
	8 kN
	13 kN
	Tri Lock
	108 g
	22 mm
	120/69 mm

Art. nr. 23-0324-22-93-62
CE 0321

NEVADA EN 362/2004/B (EN 12275 UIAA)



	Ötel Inoxidabil
	35 kN
	11 kN
	7 kN
	Tri Lock
	285 g
	28 mm
	119/78 mm

Art. nr. 23-0221-28-11-62
CE 0321

MASSIVE EN 362/2004/B (EN 12275 UIAA)



	Ötel
	52 kN
	16 kN
	18 kN
	Tri Lock
	270 g
	24 mm
	115/73 mm

Art. nr. 23-0322-24-20-62
CE 0321

TOUR EN 362/2004/B (EN 12275 UIAA)



	Aliaj aluminiu
	24 kN
	8 kN
	Screw
	86 g
	24 mm
	114/73 mm

Art. nr. 23-0523-24-15-62
CE 2777

AIKO EN 362/2004/B (EN 12275 UIAA)



	Aliaj aluminiu
	22 kN
	8 kN
	Tri Lock
	86 g
	20 mm
	110/61 mm

Art. nr. 23-0624-20-99-62
CE 0321

EVOQUE EN 362/2004/B (EN 12275 UIAA)



	Aliaj aluminiu
	24 kN
	8 kN
	Tri Lock
	95 g
	23 mm
	114/73 mm

Art. nr. 23-0524-23-15-62
CE 2777

VOLCANO EN 362/2004/T (ANSI Z359.12 CSA Z259.12)



	Ötel
	50 kN
	16 kN
	Tri Lock
	363 g
	20 mm
	162/74 mm

Art. nr. 23-0528-20-20-62
CE 0321

NEMO EN 362/2004/T



	Aliaj aluminiu
	25 kN
	Tri Lock
	170 g
	21 mm
	180/76 mm

Art. nr. 23-0328-21-93-62
CE 2777

DELTA EN 362/2004/Q (EN 12275)



	Ötel
	27 kN
	10 kN
	Screw
	88 g
	10 mm
	73/56 mm

Art. nr. 23-0110-10-00-77
CE 0082

Thank you for choosing VERTIQUAL! You have just 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 instructions must be read and understood before using the product. This PPEaF (Personal Protective Equipment against Falls) will be used along with other equipment, thus forming a system for working at heights. Please read the instructions of each component of the system before use, checking for compatibility and correct use!

Following the instructions is essential for user's safety! Failure to do so can result in serious or even fatal accidents. Keep the instructions with the product, handy and accessible to all users, so you can consult them whenever 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 a height 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! Working at heights requires good health (seek medical approval) and adequate training for the correct use of this PPEaF, for rescue and providing first aid in case of necessity and for the correct assessment of risks and dangers associated with working at heights for your workplace(s). For works with risk of falling from heights or in depths, a risk assessment must be carried out in advance according to the current regulations and legal provisions (EN standards or specific national rules) that will provide adequate measures for protection and rescue! Working at height or depth can be done only in teams of **at least two persons** and work assignments must be organized so that one person can act in case of necessity or accident.

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 by accessing the section of each product. For help or additional questions, please contact us at office@vertiqualsafety.com or Tel. (+40) 0365/882143.

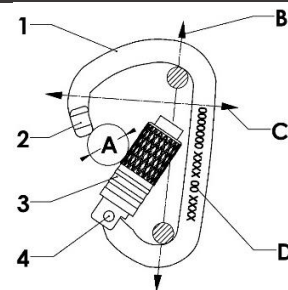
DESCRIPTION: VERTIQUAL connectors are made from high tensile steel or aluminum alloy and allow a safe and fast connection to other components for working at heights. There are various shapes and sizes that can be chosen to suit a specific application. The connectors can be either detachable (classes B and Q) or permanently attached to a product for working at heights (e.g. a shock absorbing lanyard) having a separate eyelet for this purpose (classes A and T). The gate is the element that allows the connecting / disconnecting and stays in a normally closed position which will need several deliberate user actions in order to open. The class Q screw-link has a simple nut-gate for connecting / disconnecting and it is recommended in applications where opening/closing of the nut-gate is not needed frequently.

PURPOSE: Vertiqua **snap hooks** and **carabiners** are designed to be used as **connectors** in fall arrest systems, restraint systems, work positioning systems, rope access systems, or rescue systems and are meant to be used with other certified components for working at heights.

COMPONENTS / MAIN CHARACTERISTICS

- 1 – Carabiner body (frame)
- 2 – Nose
- 3 – Gate and locking gear (spring loaded in “closed” position with manual / automatic locking)
- 4 – Rivet(s)

- A – Max. gate opening: maximum gap possible for attaching to a given element [mm]
 B – Major Axis (maximum strength is achieved when loading on this axis with the gate closed and locked correctly)
 C – Minor Axis (WARNING! loading on this axis will decrease overall strength)
 D – Marking



MARKING

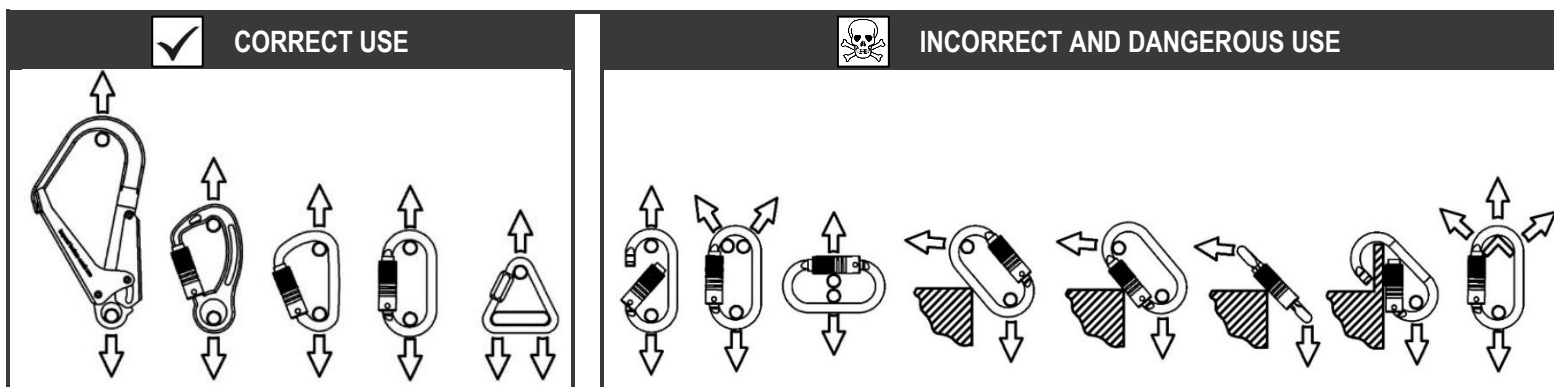
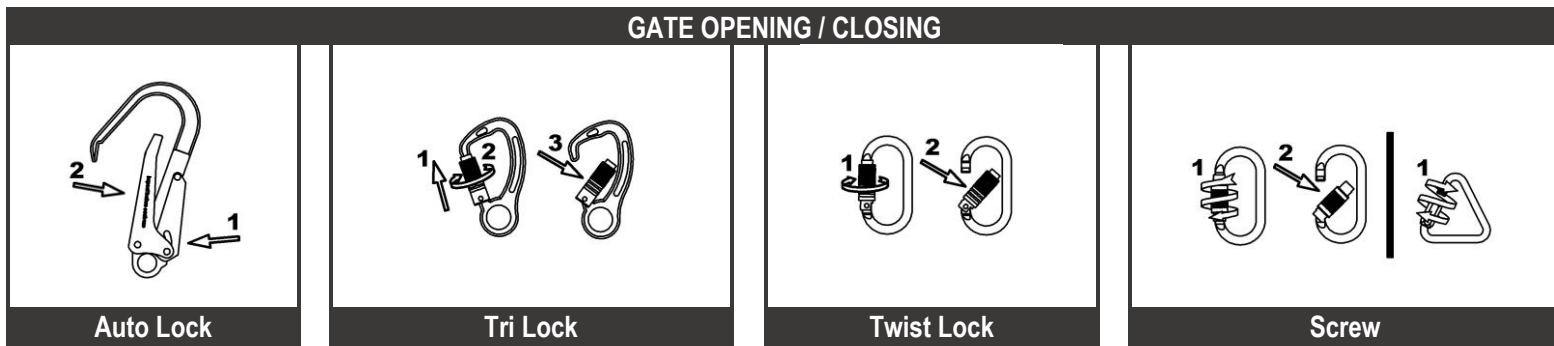
- manufacturer identification: “VERTIQUAL”
- model identification: e.g. “523 / TOUR”
- “read instructions before use” icon:
- CE marking and ID No. of the Notified Body: e.g. **CE 0321**
- European Norm (EN number: year of issue / Class): e.g. **EN 362:2004 / B**
- Batch No. / other method of identification / date of manufacture
- Minimum Breaking Strength on the Major Axis
- Minimum Breaking Strength on the minor Axis
- Minimum Breaking Strength with gate opened

*NOTE: some of these elements of the marking can be found in different places on the carabiner (check both sides of the carabiner when reading the marking)

LIMITATIONS / IMPORTANT RULES TO FOLLOW WHEN USING THIS PRODUCTS:

- **Manual locking (SCREW locking)** connectors shall NOT be used at workplaces where the user must connect/disconnect frequently!
- **Make sure that there are NO elements that can rub or put pressure on the gate while in use, thus causing damage to it or even accidental unlocking!**
- **If a connector has been involved in a fall arrest** it must be immediately withdrawn from use!
- **It is strictly forbidden to hoist materials or weights using this connectors!** (e.g. to hoist construction materials up or down);

- **Take into account the length of the connectors** used and check with the instructions of the other components of your system not to exceed any length limitation! (e.g. EN 354 lanyards must have max. 2m length including its connectors);
- **Check the shape and size of the elements that connectors are attached to** (e.g. attaching to wide webbings can distribute the load differently and decrease the strength of the connector). **WARNING!** Do NOT attach the connector to elements/structures that have sharp edges!
- **Corrosive environments:** using these connectors in corrosive environments (e.g. near sea water) may require more frequent inspections and checks to make sure that corrosion has not affected the strength of this product and its capability to protect the user!
- **Electrical and chemical hazards:** Do not install this connectors in places where they can come in contact with electric power lines, acid solutions and caustic chemicals!
- **Other hazards** include, but are not limited to: severe heat, severe cold, corrosive fluids, abrasive surfaces, sharp edges and moving parts of nearby machinery. Contact VERTIQUAL or reseller if you have any doubts before use!
- **Training:** This equipment will be used only by persons who have been properly trained for working at heights and in this product's correct use!
- **A rescue plan** must be made **before** starting the work for each specific workplace!
- **Check the compatibility** of this connectors with the other components (equipment) used! Examples of components that can be used with this connectors:
 - EN 361 – full body harnesses (fall arrest systems);
 - EN 353-1, EN 353-2, EN 355, EN 354 and EN 360 – fall arrest devices and lanyards with energy absorber;
 - EN 341 – rescue equipment;
 - EN 358 – work positioning equipment
 - EN 813 – sit harnesses (rope access systems)
 - EN 795 – anchor devices;



BEFORE EACH USE a close visual inspection of the snap hook must be carried out, to identify mechanical, chemical damage that can affect safety (NOTE: Damage to the snap hook can be inflicted without user/owner knowledge, e.g. negligence of a co-worker). **Check carefully all components of the snap hook for cracks, bends, shape distortions, sharp edges, rivet heads thinning due to abrasion, dents or grooves and the functionality of the gate (gate must fully close and lock without any difficulty!).** **WARNING!** If any damage is identified it must be immediately withdrawn from use. If there is **any doubt** regarding the safe operation of the carabiner after the visual inspection **DO NOT USE IT!** (Instead send it for inspection to the manufacturer or to an authorized representative of the manufacturer).

DURING USE the snap hook must have the gate always closed and locked! For your safety, make sure the gate is closed and the screw is tightened (screw lock), the gate is automatically closed and securely locked (Twist lock, Tri lock, Auto lock). For screw link connectors (Delta link) the nut / gate must be locked and tightened with 3 Nm. Connectors shall not get in contact with acids, solvents, bases, open fire, electric arc, intense hot metal splash and sharp edges. If there is any doubt regarding conditions of use contact the manufacturer /distributor.

WARNING! Make sure that in use, other elements present at the workplace (e.g. beams, edges, pipes, other ropes etc.) cannot rub or put pressure on the gate thus causing damage to it or even accidental unlocking of the gate!

STORAGE AND TRANSPORTATION: Store unpacked in a cool, dry, dark place away from excessive heat or heat sources, high humidity, sharp edges, corrosive agents or other possible causes of damage. **Do not store wet!** Care must be taken not to inflict any damage to the connectors during transportation! It is recommended they are packed individually to avoid surface damages and none of the damaging factors mentioned above must not come in contact with the connectors during transport.

MAINTENANCE: Wash in warm water of domestic supply quality (maximum temperature 40 °C). To clean effectively is possible to use a soft brush or a soft sponge. Cleaning using pressurized water is forbidden! (e.g. pressure washer pump). Rinse and dry naturally in a warm room away from direct heat sources. Lubricate the gate mechanism with a silicone based lubricant. This should be carried out after cleaning. Note: Cleaning and lubrication is recommended after every use in marine environment.

REPAIRS: Repairs or modification can be performed **only by the manufacturer!**

