

ENERGY02

User Manual

ENERGY02

Full body harness

Subject to technical changes

BRIEF DESCRIPTION

INTENDED USE

The full body harness ENERGY02 is part of personal protective equipment (PPE) of category III to prevent falls from heights. The full body harness ENERGY02 only serves to prevent people falling from e.g. ladders or a hazard zone when abseiling or rappelling.

Application temperature: -20 °C to +80 °C

Recommended securing options:

- Full body harness in compliance with EN 353-2 or EN 353-1
- Energy absorber acc. to EN 355 with connector acc. to EN 354
- Height securing device in compliance with EN 360

This equipment may only be used by persons familiar with personal fall prevention equipment and the risks associated with working in areas where there is a risk of falling.

All other uses are deemed improper. The company BORNACK will not be liable for any ensuing damages. The user bears the sole risk.

Maximum number of users: 1 person

Maximum user weight including clothing and equipment: 140 kg

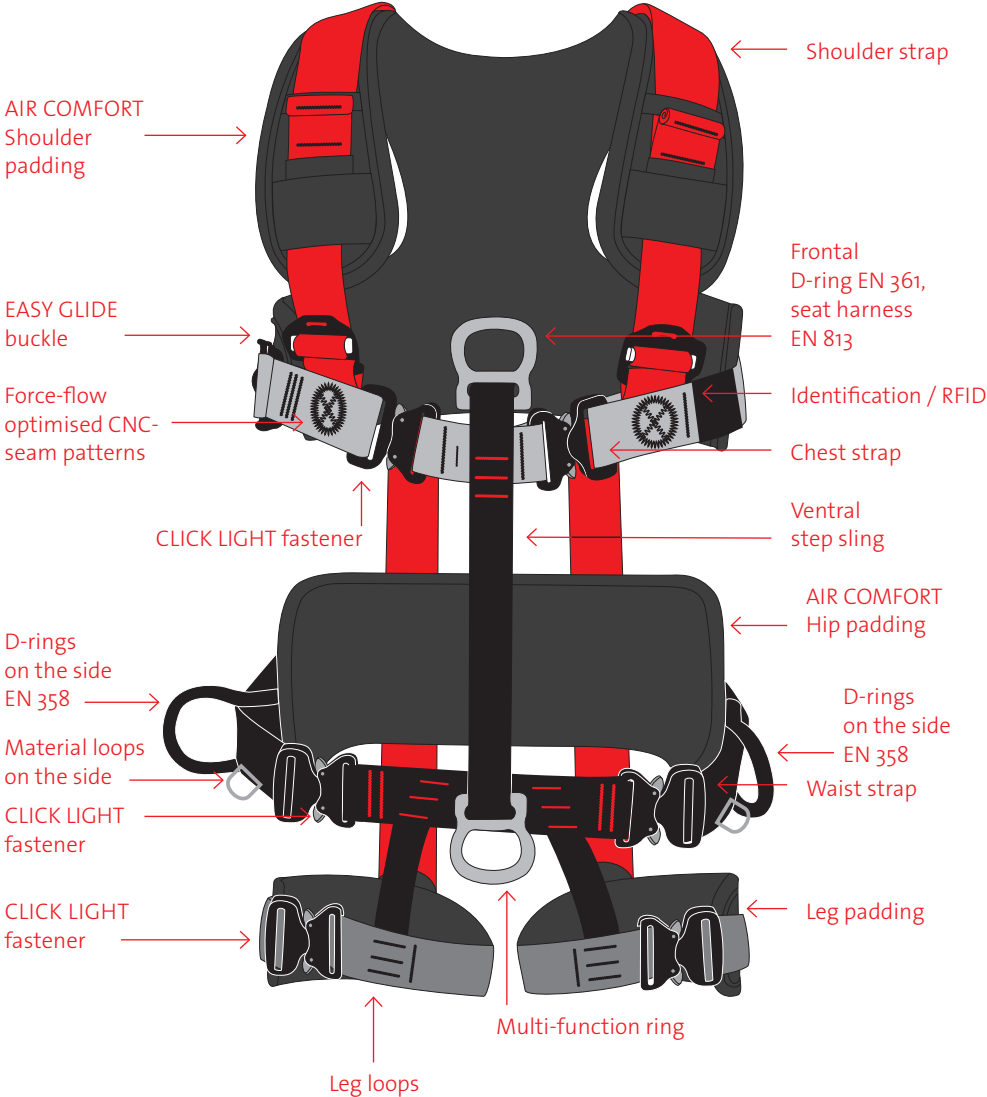
EQUIPMENT

- Rear D-ring made of steel
- Front D-ring made of aluminium
- D-rings on the side made of aluminium
- Multi-function eyelet made of aluminium.
- Ventral step sling: Optimisation of the suspended position by shifting the body weight after a fall:
- 3 material eyelets made of steel
- Very strong strap made of synthetic fibres
- Force-flow optimised CNC-seam patterns
- EASY GLIDE buckle made of steel
- CLICK LIGHT fasteners with length adjustment on the legs, chest and waist belt made of aluminium
- AIR COMFORT hip padding
- Leg padding
- AIR COMFORT shoulder pads
- Label bag with product information and RFID

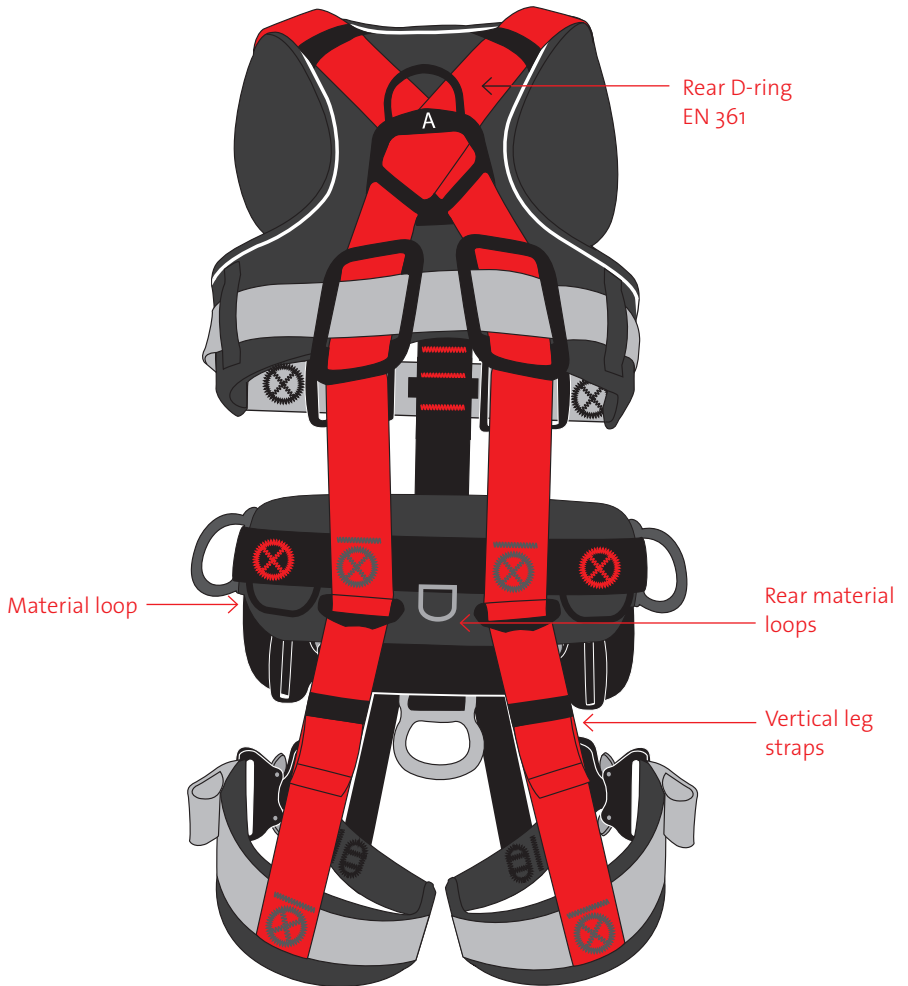
USE

- Arresting
- Lowering
- Climbing with a guided type fall arrester with a flexible or rigid anchorage line
- Positioning
- Retention
- Rescue

FRONT SIDE



REAR SIDE



INFORMATION BEFORE USE



**Always check every time
before use!**

- Always carry out a visual inspection and test the function every time before use!
- The personal protective equipment (PPE) may no longer be used in the case of even very minor faults.
- Faulty PPE may only be tested or repaired by a workshop authorised by BORNACK.
- The user must have completely read and understood the User Manual before use.

VISUAL INSPECTION

- Check that the system is complete.
- Are all components complete?
- Check that the system is undamaged.
- Are all seams undamaged?
- Can you see or feel any damage in the textile components?
- Are there any obvious signs of damage to the fittings, D-rings, buckles, karabiners?
- The last inspection by an expert was carried out within the past 12 months.
- Identification is legible.

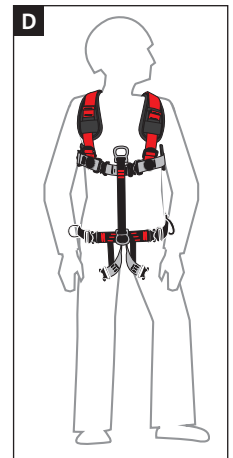
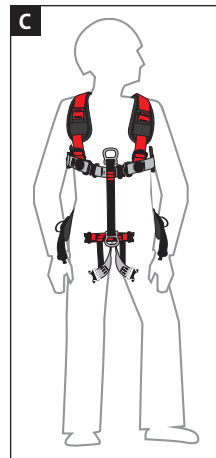
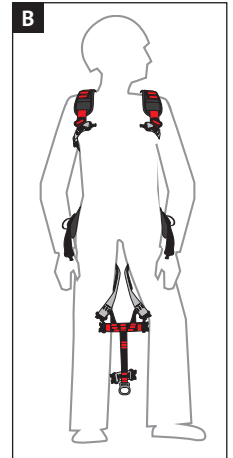
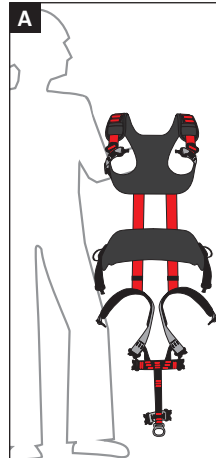
FUNCTION TEST

- CLICK LIGHT fastener functional?
- EASY GLIDE buckles functional?

ENERGY02 IN USE

PREPARATION

- A** Lift the harness of the rear arresting D-ring. All CLICK LIGHT fasteners must be open. Straps must hang freely and may not be twisted
- B** Put on the arrester harness like a jacket: Arms through the shoulder straps.
- C** Pull the ventral step sling between your legs and then close the chest strap.
- D** Close the waist strap.



ENERGY02 IN USE

E Pull the leg straps individually between your legs and then close. Ensure that the loops are not crossed or twisted.

F Set the harness in the following sequence.

- 1st Chest strap
- 2nd Waist strap
- 3rd Leg straps

Tighten the straps so that you can place one hand between the strap and your leg.

The full body harness must be set to the wearer's body size (including clothing).

Check the fit of the arrester harness. The shoulder harness and leg straps should be flush to the body but not too tight.

The shoulder harness straps should be set to the same length. The rear arresting D-ring must sit centrally on the AIR COMFORT padding.

CAUTION: RISK TO LIFE!



If the harness straps, fasteners and D-rings/loops of the harness are not put on or set correctly, there is a risk of falling.

ATTENTION:

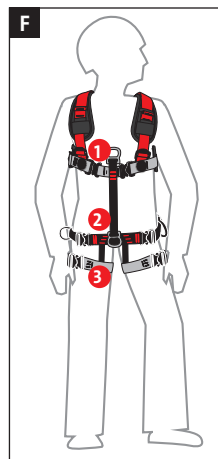
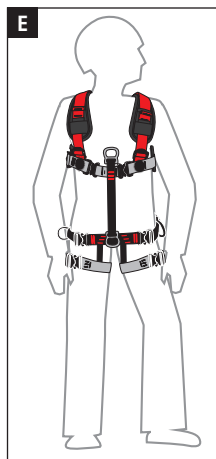


The D-rings on the side must be positioned correctly and only serve holding, and may only be used with the certified restraint lanyard shortener system.

ATTENTION:



The material loops on the side may not be used for attachment, arresting, holding or positioning! They are not adequately strong.



ATTENTION:



When using the seat harness EN 813, ensure it is set to the correct size. Carry out a hanging test before starting work.

ATTENTION:



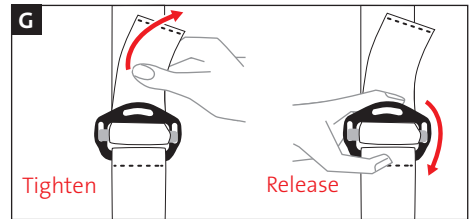
Protruding harness strap into the designated strap storage place, otherwise there is a risk of injury.

ENERGY02 IN USE

EASY GLIDE BUCKLE

G This buckle is only for adjusting the length of the harness strap.

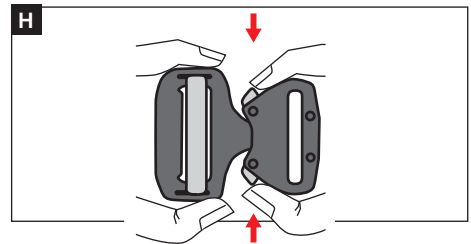
- Tilt the buckle.
- Pull the open strap to tighten until the required position is reached. To release/loosen the buckle, tilt and then pull it. When the buckle is let go, the strap position is maintained.



CLICK LIGHT FASTENER

H This fastener is used to close and set the leg straps.

- Using your thumbs and index fingers on both hands, slightly squeeze the buckle and exert pressure on the lock wings. If the CLICK LIGHT fastener is under tension, it cannot be opened.
- Pull the respective strap until the required position is reached.
- To release the buckle setting, tilt and then pull the harness strap.



CAUTION: RISK TO LIFE! 

All fasteners need to be set correctly and closed before the harness is used.


ATTENTION: 

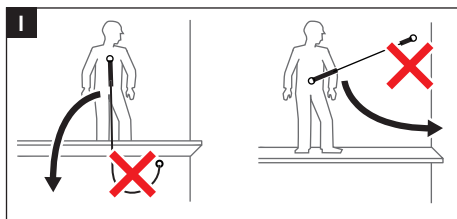
Check the fasteners and buckles regularly during use.

ENERGY02 IN USE


APPLICATION

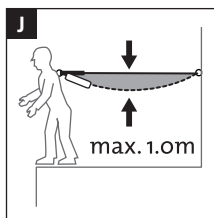
- I Attachment points must be adequately strong, according to EN 795, and should be positioned above the user.

ATTENTION:  Do not select an anchor point to the side of the secured person! Otherwise, the person could bang laterally into parts or a wall.



Ensure that the free fall is reduced to a minimum.

ATTENTION:  Before using, ensure adequate clearance below the user to prevent impact on a protruding object or the ground.



- J For attachment to anchor points, use a guided type fall arrester including a rigid anchor line acc. to EN 353-1, a guided type fall arrester including a flexible anchor line acc. to EN 353-2, a connector acc. to EN 354 **with** shock absorber acc. to EN 355. Observe the User Manual of the PPE used.

CAUTION: RISK TO LIFE!  Always use the lanyard with an energy absorber! Always keep the lanyard taut.

ATTENTION:  Check that the harness sits correctly.

ENERGY02 IN USE

APPLICATION VARIANTS

Restraint:

K When setting, ensure that the side D-rings are at waist height. Set the vertical leg straps loosely for more comfort. To do this, tilt the EASY GLIDE buckles at the back and bend forward.

Ensure that the restraint lanyard is always taut and that the freedom of movement is maximum 0.6 m.

Climbing:

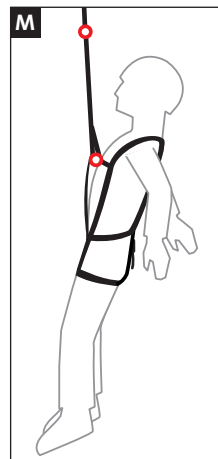
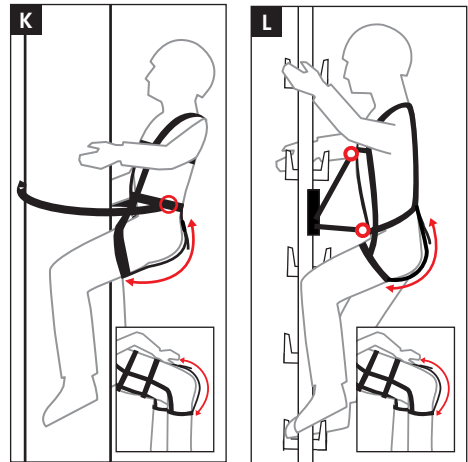
L When climbing with the guided fall arrester with a rigid anchor line, set the vertical leg straps longer for more comfort when used. To do this, tilt the EASY GLIDE buckles at the back and bend forward.

Observe the User Manual of the guided type fall arrester.



M In case of a fall, the ventral multifunctional D-ring moves upwards and also offers upper body support thanks to the chest strap for an ergonomic hanging position.

Observe the User Manual of the arresting device.



ENERGY02 IN USE

Positioning / seat harness:

N Set the vertical leg straps longer for more comfort. To do this, tilt the EASY GLIDE buckles at the back and bend forward.

O Preferably, the upper (front) D-ring of the ventral step sling should be used. The upper body is supported by the all-round chest strap.

Restraint:

P Set the vertical leg straps shorter for better load distribution. Pull the strap end of the vertical leg straps down to tighten.

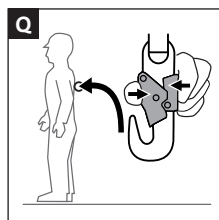
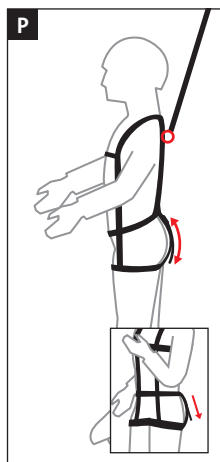
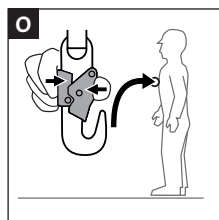
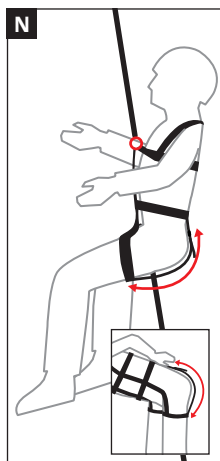
Q Attach the connector to the rear D-ring.

ATTENTION:

Avoid excess free suspension. There is a risk of suspension trauma.

ATTENTION:

Adjust the setting options to the respective work situation, otherwise there is a risk of injury.



ENERGY02 IN USE

COMBINATION

When combining this product with other parts, there is a risk of mutual impairment with respect to the function and safety. Compatibility must be assessed during the risk analysis. Only combine with personal protective equipment that bears a CE symbol. If you have any questions about compatibility or you require help with the risk analyses, feel free to contact BORNACK.

SAFETY REGULATIONS

There is a risk to life if these safety instructions are not observed.

- The personal protective equipment (PPE) may no longer be used even in the case of very minor faults.
- Damaged, fall-stressed or dubious personal protective equipment or safety devices must be immediately withdrawn and not used. The equipment may only be inspected by an expert in compliance with DGUV (German Social Accident Insurance) principle 312-906, by BORNACK or by a workshop authorised in writing by BORNACK. This must be documented in the test card.
- Independent modifications or repairs are not allowed.
- Rope protection is part of the personal fall prevention equipment and should be assigned to a specific person.
- The personal protective equipment may only be used by qualified staff that are familiar with the material. They must be proficient in handling the personal protective equipment and must have been briefed about the possible risks associated with its use.
- In accordance with the accident prevention guidelines (UVV), the users of personal protective equipment against falls (Category III) must attend a theoretical training course and a practical training course. Make use of the training competence of the BORNACK training centres: info@bornack.de
- Clothing and shoes must be suitable for the task at hand and the weather conditions.
- Only use if fully fit and healthy.
- Health impairments (e.g. the use of medicines or alcohol, heart or blood circulation problems) can jeopardise the safety of the user when working at heights or depths.
- Protect personal protective equipment during storing, use and transportation against the effects of heat (e.g. welding flames or sparks, burning cigarettes) and chemicals (e.g. acids, alkalis, oils, etc.) and mechanical effects (e.g. sharp edges).
- Calculation of the possible fall path if all necessary PPE components are used correctly: (if necessary braking path HSG) + surplus lanyard (situation-dependent) + braking path energy absorber (max. 1.75 m) + height of D-ring (1.5 m) + safety reserve 1.0 m.
- If a casualty hangs motionless in a full body harness for a longer time, blood cannot flow back from the legs and/or the flow may be interrupted. This can lead to a suspension trauma, a circulatory shock with serious to fatal consequences. This can be delayed or ruled out by using PRUSIK relief slings. Due to the load change on correctly set PRUSIK relief slings, the veins in the legs are no longer cut off by the harness, the muscle pump is activated and the congestion of the flow of blood is minimised. Also, changing the setting of the harness straps allows a more pleasant hanging position with less constriction. The fastest rescue possible must be guaranteed.

SAFETY REGULATIONS

- Before starting work, the responsible person must draw up a plan of rescue measures It records, how to rescue casualties quickly and safely and ensures first aid measures. Casualties must be rescued within 20 minutes. BORNACK can help you draw up tailor-made rescue plans and includes these in the necessary training courses.
E-mail hotline: info@bornack.de
- The local safety guidelines (e.g. in Germany, the DGUV Regulations 112-198 and 112-199 issued by the professional associations) and the accident prevention guidelines for the specific industry (UVV) must be observed.
- Application temperature: -20 °C to +80 °C.
- The full body harness must be set to the wearer's body size (including clothing).

OTHER

APPROVAL:

Complies with the Regulation (EU) 2016/425 for PPE.

EU type testing (Module B) and production monitoring (Module C2) by:

DEKRA Testing and Certification GmbH
Dinnendahlstr. 9, D-44809 Bochum
CE 0158

Quality management system certified to ISO 9001:2015.

Production monitoring by notified office in accordance with Category III.

REGULAR INSPECTIONS

This PPE must be inspected by the manufacturer or by an expert at least once a year. The result must be documented in the test card at the end of this User Manual.

SALES

The dealer must ensure that the User Manual is supplied in the language of the designated country. The respective translation must be authorised by BORNACK.

SERVICE

If you have any further questions about safe use of this PPE or other BORNACK services, such as:

- Risk analysis
- Rescue plans
- Training courses
- Expert inspections

If you have any questions, please contact our e-mail hotline: info@bornack.de
We will be happy to help!

MAINTENANCE

- If necessary, apply a small amount of oil on the joints so that the moving parts of the karabiner and other devices run smoothly.
- Maintenance may only be carried out by a qualified expert. All instructions in this User Manual must be strictly observed.
- Protective equipment that is well looked after will last longer!

OTHER

CLEANING

- Dry damp personal protective equipment in the air, not on artificial heat sources. Dry metal components with cloths.
- Clean soiled textile components (e.g. arrester harnesses and ropes) with lukewarm water and a little detergent for delicates. Then rinse carefully and allow to dry in the air.
- Other cleaning agents are not allowed!
- If you have any questions about disinfection, please contact our e-mail hotline: info@bornack.de
- If the personal protective equipment comes into contact with salt-water, keep it wet until it can be rinsed with plenty of distilled water.
- If necessary, use compressed air to blow on the unit.

LIFE SPAN

The following recommendation applies for the use of the ENERGYo2:

Maximum usage period after being used for the first time: 10 years

In ideal storage conditions and annual inspections, the product may be stored for up to 3 more years before it is used for the first time without impacting on the stated maximum usage period. Every further year in storage reduces the final maximum allowed usage period by 1 year.

For reasons of safety, intensive use and/or extreme application conditions such as sharp edges, chemical influences etc. will reduce the usage period. The company owner needs to ensure this in the workplace risk analysis.

The company owner must ensure compliance with the maximum usage period by documenting first-time use in the test card.

The test card at the end of this User Manual must be presented during the regular expert inspections and be completed by an expert.

For more details, please visit: www.bornack.de and review the BORNACK document 'Life span of textile PPE components'.

REPAIRS

For reasons of liability, repairs may only be carried out by the manufacturer.

Only original spare parts from the manufacturer may be used.

STORAGE

- Dry wet PPE before storage.
- Store in a dry place away from direct sunlight.
- Do not store PPE near radiators. Permanent exposure to temperatures above +50 °C has a negative impact on the strength of the textile material and shortens the life span.
- Do not allow PPE to come into contact with aggressive substances (e.g. oils, grease, acids, chemicals etc.).
- Protected storage in the device case or device bag.

OTHER













TRANSPORT

- Protected transport in the device case or device bag.

OTHER

PRODUCT IDENTIFICATION

The following identification is on the product:

<p>Product name →</p> <p>Product category →</p> <p>Type →</p> <p>Size →</p> <p>Item number →</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> <div> <p>ENERGY02</p> <p>Auffanggurt</p> </div> <div style="text-align: right;">  <p>Logo</p> </div> </div> <div style="margin-top: 10px;"> <p>TYP NRG02/CKL,AIR,MFOEV,AOES, AOED,SHOE,ET,RFID,PS</p> <p style="text-align: right;">M-XL</p> <p> 1005066_G031</p> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;">     </div> <p style="text-align: right;">Handling buckles</p>	
<p>Observe/read the User Manual. →</p> <p>Charge →</p> <p>Serial number →</p> <p>Production date →</p> <p>Max. user weight →</p> <p>Contact →</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> <div> <p></p> </div> <div style="text-align: right;"> <p>CE 0158</p> <p>CE symbol and number of the test office</p> </div> </div> <div style="margin-top: 10px;"> <p>LOT 19-1234567 EN 358:2018</p> <p>SN 001 EN 361:2002</p> <p> 05/2019 EN 813:2008</p> <p> 140 kg</p> </div> <div style="text-align: right; margin-top: 10px;">  <p>EN norms</p> <p>Data matrix</p> </div>	<p>EN 358:2018 →</p> <p>EN 361:2002 →</p> <p>EN 813:2008 →</p>
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>There is more information here.</p> </div> <div style="text-align: center;">  <p>Here is the RFID chip for reading the product data digitally.</p> </div> </div>		



There is more information here.



Here is the RFID chip for reading the product data digitally.

EU DECLARATION OF CONFORMITY



EU Declaration of Conformity

The manufacturer or his authorised representative established within the EU

BORNACK GmbH & Co. KG
Bustadt 39
74360 Ilsfeld
Germany

hereby declares that the following personal protective equipment

Full body harness, work positioning belt and sit harness
ENERGY02

- is in conformity with the relevant harmonisation legislation according to Annex V (Module B) of the Regulation (EU) 2016/425 on personal protective equipment according to Article 19 (category III PPE) and is examined to **EN 358:2018** **EN 361:2002** **EN 813:2008**

- is identical to the PPE that is the object of the **EU type-examination certificate**
No. ZP/B109/19

issued by

DEKRA Testing and Certification GmbH
Dinnendahlstraße 9
44809 Bochum
Germany
CE 0158

- is subject to the assessment of conformity to type, based on internal production control plus supervised product checks according to Module C2 of the Regulation (EU) 2016/425 for personal protective equipment (category III PPE), monitored by the notified body

DEKRA Testing and Certification GmbH
Dinnendahlstraße 9
44809 Bochum
Germany
CE 0158

05 August 2019

BORNACK GmbH & Co. KG

Klaus Bornack
Managing Director

A handwritten signature in blue ink, consisting of several loops and a long vertical stroke, positioned to the right of the printed name and title.

TEST CARD

FOR ANNUAL MONITORING

The test card must be completed in full by the expert during the annual inspection.

This test card does not claim to cover all test criteria and does not relieve the expert from his decision about the overall condition.

Manufacturer:
BORNACK GmbH & Co.KG
info@bornack.de
www.bornack.de

Type product name: _____

Production date: _____

Serial no.: _____

Purchase date: _____

Date of first Use: _____

Maximum life span until: _____

Application field: _____

	Date	Signature	Next inspection	Reason for inspection
Year 1				
Year 2				
Year 3				
Year 4				
Year 5				
Year 6				
Year 7				
Year 8				
Year 9				
Year 10				



FALLSTOP

Safety equipment for securing and rescuing at heights and depths

SAFEPOINT

Planning and assembly of stationary securing systems

BORNACK GmbH & Co. KG

Bustadt 39
74360 Ilsfeld
Germany

Tel + 49 (0) 70 62 / 26 90 0-0
Fax + 49 (0) 70 62 / 26 90 0-550
info@bornack.de
www.bornack.de

© BORNACK – Subject to technical changes
Reprinting or duplication, even of excerpts, is only permitted
with written consent
Status: 07/2020 GAL Art.-No. 8000106_EN ebo

