

ONE FLEX

User Manual

CE 0123

EN 354:2010, EN 355:2002, CNB/P/11.074, ONE FLEX Y also CNB/P/11.063

ONE FLEX, ONE FLEX Y

Tape energy absorber with a lanyard

Subject to technical changes

BRIEF DESCRIPTION

INTENDED USE

The tape energy absorber with the lanyard ONE FLEX and ONE FLEX Y is part of personal protective equipment (PPE) of category III to prevent falls from heights. The tape energy absorber with lanyard is attached to an adequately strong attachment point and a full body harness according to EN 361. They only serve to secure a person against a fall, e.g. when working on scaffolds, platforms, roofs, steel constructions etc.

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

In combination with other PPE ensure that the entire length of the connection between persons and the attachment point does not exceed 2.0 m (including the energy absorber, lanyard and connecting elements).

- Maximum number of users: 1 person
- Maximum user weight including clothing and equipment: 140 kg
- Minimum user weight: 50 kg
- Application temperature: -30 °C to +60 °C

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

BRIEF DESCRIPTION

FUNCTION

After a fall, the energy tape absorber regulates the intensity of the fall impact and absorbs this to maximum 6 kN.

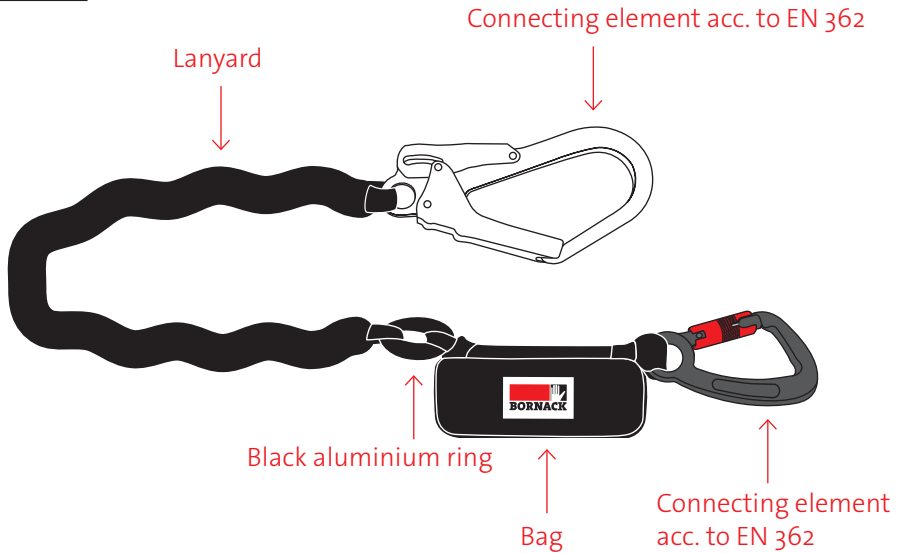
EQUIPMENT

- Tape energy absorber according to EN 355 made of polyester and polyamide
- Black aluminium ring
- Lanyard made of DYNEEMA®, polyamide, polyester and elastane.
- Connecting elements in compliance with EN 362 from aluminium or steel

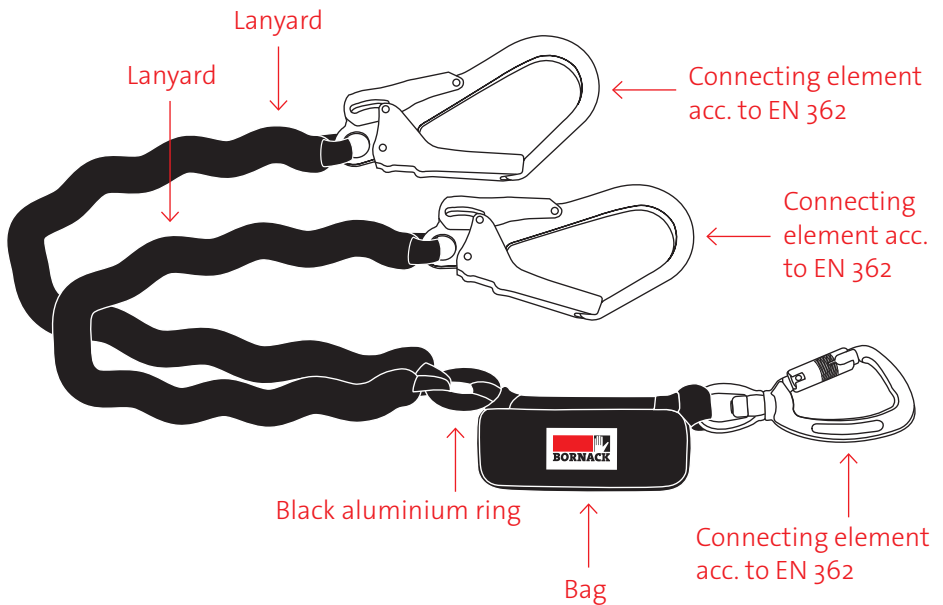
USE

- Arresting
- Reduction of the fall impact after a fall
- Retention

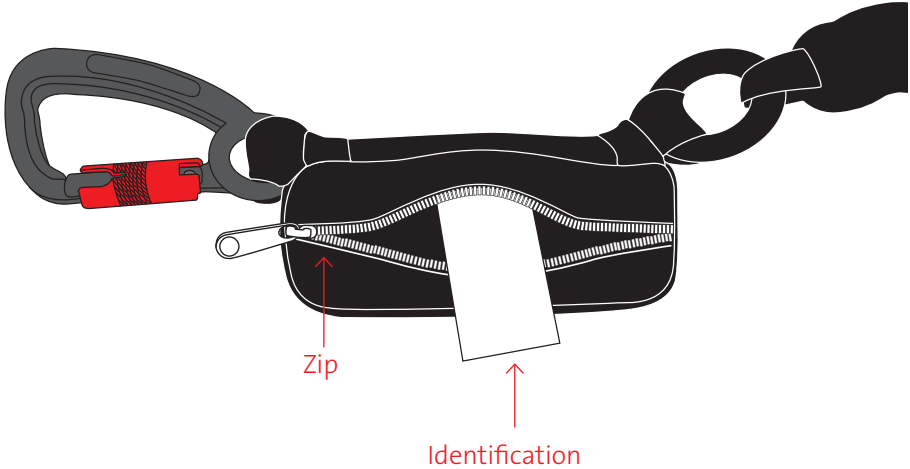
ONE FLEX



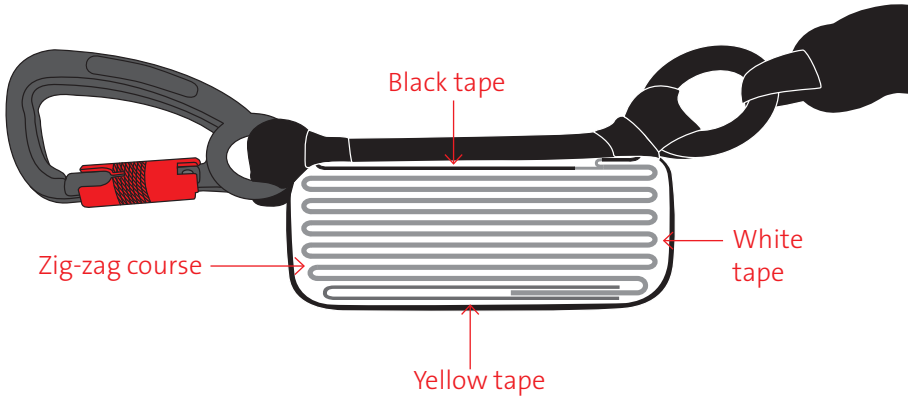
ONE FLEX Y



IDENTIFICATION IN THE BAG



TAPE COURSE INSIDE THE BAG



INFORMATION BEFORE USE



Always check before use!

- The personal protective equipment (PPE) may no longer be used even in the case of very minor faults, or if there is any doubt about safe use.
- Faulty PPE components may only be tested or repaired by BORNACK or in a workshop authorised in writing by BORNACK.
- Regular inspections are essential because the safety of the user depends on the efficiency and durability of the PPE.
- The user must have completely read and understood the User Manual before use.

VISUAL INSPECTION

- Tape energy absorber with a lanyard complete and flawless.
- There are no visible signs of damage to the lanyard nor can faults be felt with the hands. Seams are undamaged.
- Black aluminium ring undamaged.
- Connecting elements without damage.
- Safety seams of the tape energy absorber are undamaged.
- Product identification legible.
- The last inspection by an expert was carried out within the past 12 months.

CAUTION:




The tape energy absorber must be immediately withdrawn from use after a fall load. After an in-depth inspection, an expert decides about the re-release according to DGUV Principle 312-906 based on their technical expertise. Only use with the written approval of the expert.

FUNCTION TEST

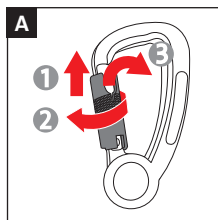
- Fasteners of the connecting elements and their locks are functional.

ONE FLEX IN USE

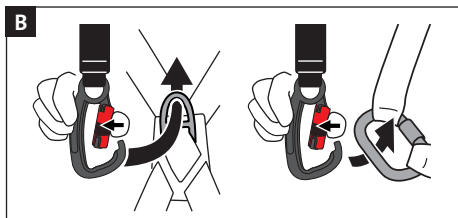
ATTACHMENT TO THE FULL BODY HARNESS

Use the full body harness acc. to EN 361 and observe the User Manual of the full body harness. 

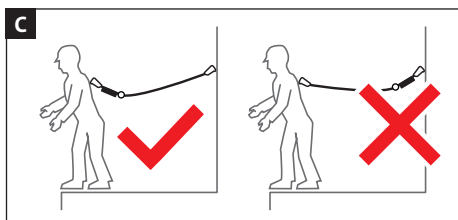
A Open the connecting element of the energy absorber. Observe the User Manual of the connecting element. Push up and turn the fastener of the TWISTLOCK PLUS karabiner, then open the snapper.



B Hook the connecting element of the energy absorber into the D-ring at the front or rear of the full body harness marked A.



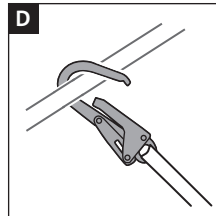
C The energy absorber always needs to be attached to the full body harness and not to the attachment point. Otherwise, the energy absorbing function of the energy absorber could be compromised




ONE FLEX IN USE

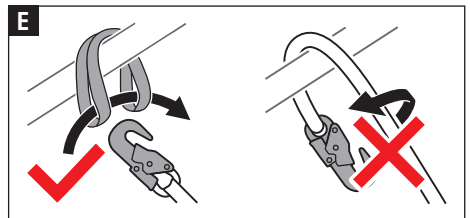
ATTACHMENT TO THE ANCHOR POINT


D Attach the lanyard to a secure attachment point.



CAUTION THREAT TO LIFE:  Attachment points must be adequately strong (observe 12 kN according to EN 795 and/or DGUV Regulation 112-198)!

E Protect connecting elements against shearing forces (bending). If necessary, create an attachment point with a tape sling (e.g. PROTEC S).

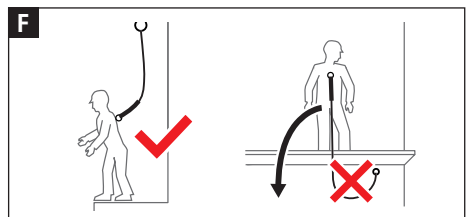



CAUTION THREAT TO LIFE:  ONE FLEX and ONE FLEX Y may not be used in a noose or cow hitch! Instead, create an attachment point with a tape sling (e.g. PROTEC S)!

Observe the User Manual of the connecting elements.



F If possible, select an attachment point vertically above the work point.




CAUTION THREAT TO LIFE:  When selecting the attachment point, always minimise the fall height and/or the free fall!


ONE FLEX IN USE

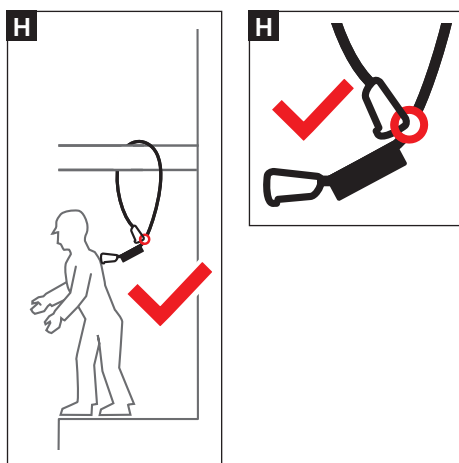
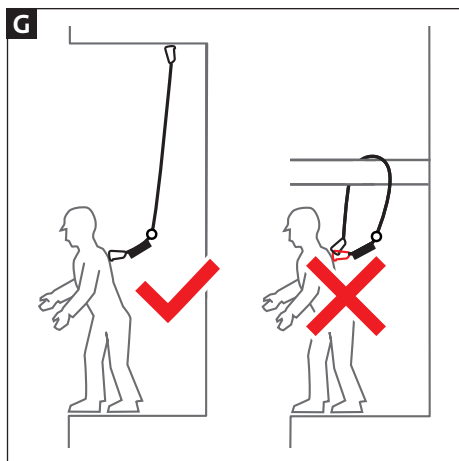
APPLICATION

G Only use the energy absorber in a way that allows it to assume the fall-absorbing function in case of a fall.

H If the lanyard is wrapped around a part for anchoring, the connecting element of the lanyard may only be hooked into the black aluminium ring.

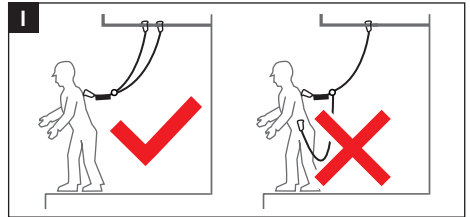
CAUTION THREAT TO LIFE:  Hooking it anywhere else is dangerous and can lead to a fall!

CAUTION:  Therefore, the part needs to be checked to ensure that its surface is suitable for this application, e.g. it has no sharp edges.

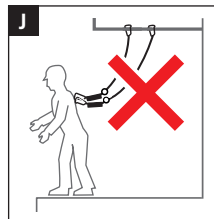


ONE FLEX IN USE

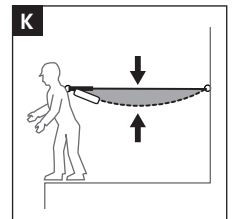
I When using the ONE FLEX, always ensure that both strands are hooked to the attachment point. Never hook the free strand into the full body harness.



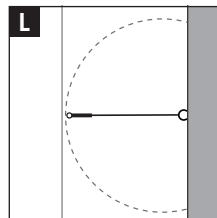
J Two separate ONE FLEX tape energy absorbers with a lanyard may not be fitted in parallel.



K Avoid slack lanyard (slack line). Slack rope extends the fall path.




L When working on the fall edge, select a tape energy absorber with a lanyard that is long enough to allow the fall edge to be reached but which prevents a fall.



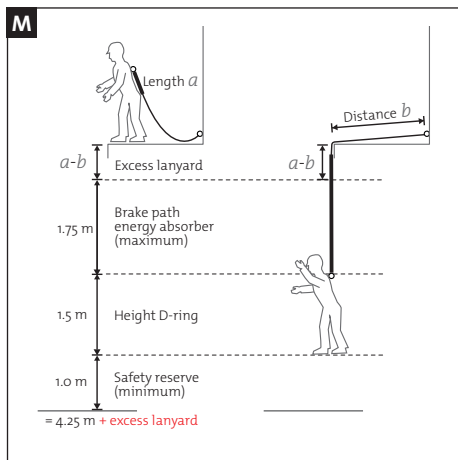
ONE FLEX IN USE

Measure that there is adequate clearance below the edge.

CAUTION THREAT TO LIFE:  The lanyard excess is the difference between the length of the lanyard a (incl. energy absorber, end connections and connecting elements) and the distance between the attachment point and the fall edge b and always needs to be calculated into the required clearance!

Example calculation:

When attaching a 2.0 m long lanyard ($a = 2.0$ m) directly on the fall edge ($b = 0$ m), a clearance of 6.25 m is required.



ONE FLEX IN USE

SPECIAL INFORMATION ABOUT HORIZONTAL USE

The tape energy absorber with a lanyard ONE FLEX and ONE FLEX have also been tested successfully according to CNB/P/11.074 for horizontal use and a resulting simulated fall over the edge. A burr-free steel rod with an edge radius $r = 0.5 \text{ mm}$ was used. Based on this test, ONE FLEX and ONE FLEX are suitable for use on similar edges, for instance on rolled steel profiles or parapet panels. Regardless of this test, if the device is used horizontally or at an incline where there is a risk of falling over an edge, the following information and additional instructions in this User Manual also need to be taken into account.

CAUTION:



Also check the following in the risk assessment:

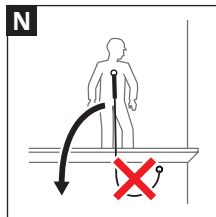
- Is the radius of the fall edge greater than 0.5 mm?
- Is the edge burr-free?

If this is not the case, precautions should be taken:

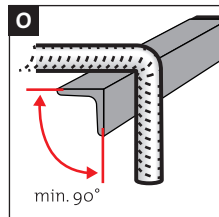
- Use a retention system to rule out a fall.
- Attach a suitable edge protection.
- Contact the manufacturer.

ONE FLEX IN USE

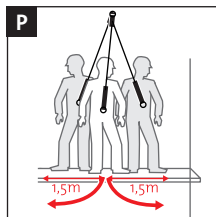
N The attachment point must lie above where the user is standing. It may not lie below where the user is standing.




O The deflection at the edge must be at least 90°.



P To prevent a swinging fall, work areas or lateral movements from the central axis to both sides need to be limited to max. 1.5 m respectively. In other cases, no individual attachment points should be used, instead e.g. attachment devices of the types C (only if approved for joint use) or D according to EN 795 should be used.



CAUTION THREAT TO LIFE: 
If ONE FLEX and ONE FLEX Y are used with an attachment device in compliance with EN 795-C, the movement of the attachment device needs to also be taken into account when calculating the required free space below the edge.

Observe the User Manual of the anchor equipment.



ONE FLEX IN USE

CAUTION:



When falling over an edge there is a risk of injury during the fall by banging into the building or parts of the construction.

CAUTION:



In the event of a fall over an edge, special measures need to be defined and practiced.

COMBINATION

If this product is combined with other components, there is a risk that they might mutually impact on operating safety which is why they should only be used and combined in combination with CE-identified and compatible parts of fall protection equipment (PSAgA) and rescue equipment.

CAUTION:



In combination with other PPE, ensure that the entire length of the connection between persons and the attachment point does not exceed 2.0 m (including the energy absorber, lanyard and connecting elements).

SAFETY INSTRUCTIONS

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, 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 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 fall protective equipment (Category III) must attend a theoretical training course and a practical training course. To this end, profit from the training competence of the BORNACK training centres info@bornack.de
- Accessories from other manufacturers may only be used if approved by BORNACK and may not impair the function and safety of the protective equipment.
- Clothing and shoes must be suitable for the task at hand and the weather conditions.
- Only use if fully fit and healthy.
- Health impairments can jeopardise the safety of the user when working at heights or depths.
- If this PPE is used as an arrester system (free fall is possible), only full body harnesses that comply with EN 361 may be used.
- Calculation of the possible fall path, if all necessary PPE components are used correctly: surplus lanyard (situation-dependent) + braking path energy absorber (max. 1.75 m) + height of D-ring (1.5 m) + safety reserve 1.0 m.
- A lanyard may not be used for arresting purposes without an energy absorbing element e.g. an energy absorber.

SAFETY INSTRUCTIONS

- Before using, ensure adequate clearance below the user to prevent impact on a protruding object or the ground.
- 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) and mechanical impact (e.g. sharp edges).
- The combinability and protective effect of the PPE must be checked for each hazard situation (risk assessment).
- This PPE has been tested and approved for edge loads. However, extreme loads are always a risk factor. BORNACK recommends using edge protection collars.
- 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.
- Before starting work, the responsible person must draw up a plan of rescue measures that defines 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.

OTHER

APPROVAL

Complies with the EC Directive 2016/425 for PPE.

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

TÜV SÜD Product Service GmbH
Ridlerstr. 65, D-80339 Munich CE 0123

Quality management system certified to DIN EN ISO 9001:2015.

Production monitoring by notified office in accordance with Category III.

Supplementary product inspections:

- ‚Horizontal use‘ and ‚load over edge‘ (r = 0.5 mm) acc. to CNB/P/11.074.
- ONE FLEX Y also: CNB/P/11.063 (special tape energy absorber with a Y-lanyard).

REGULAR INSPECTIONS

- This personal protective equipment must be inspected at least once a year by an expert in compliance with DGUV Principle 312-906. The result must be documented in the test card at the end of this User Manual.
- If the tapes of the tape energy absorber have been removed from the bag, ensure when they are returned that they are stowed correctly (see page 5) to prevent malfunctions.

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.

OTHER

SERVICE

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

- Risk analysis
- Rescue plans
- Training courses
- Expert inspections
- Technical inspections
- Maintenance + inspections

please send your question to 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. If possible, use precision mechanics oil. Ensure that the oil does not come into contact with textile PPE components.
- Maintenance may only be carried out by a qualified expert in compliance with DGUV Principle 312-906. All instructions in this user manual must be strictly observed.
- Protective equipment that is clean and well looked after will last longer!

CLEANING

- Dry damp personal protective equipment in the air, not on artificial heat sources. Dry metal components with cloths.
- Brush off soiled bag of the ONE or wipe with a wet cloth. Then allow to dry in the air.
- The lanyard, but not the tape energy absorber, may be washed with lukewarm water and a delicates detergent. Then rinse carefully and allow to dry in the air. The lanyard may only be cleaned if the tape energy absorber does not come into contact with the delicates detergent through the washing process.
- Other cleaning methods not described here are not allowed.
- If disinfection is necessary, please contact the e-mail hotline: info@bornack.de
- If the personal protective equipment comes into contact with saltwater, keep it wet until it can be rinsed with plenty of distilled water.
- Use compressed air to blow on the PPE if necessary.

OTHER

LIFE SPAN

The following recommendation applies for the use of the ONE FLEX und ONE FLEX Y:

Maximum usage period after being used for the first time: 8 years

In ideal storage conditions and annual inspections, the product may be stored for up to 3 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.

Metal parts are not subject to age-related life span deadlines. The expert makes a decision about these parts based on his technical expertise.

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

If ONE FLEX and ONE FLEX Y are wrapped around parts of the building for attachment, a higher level of wear can be expected.

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 is available online at www.bornack.de

REPAIRS

- For reasons of liability, repairs may only be carried out by BORNACK or in a workshop authorised in writing by BORNACK.
- Only original spare parts from the manufacturer may be used.

OTHER

STORAGE

- Dry damp PPE **before** storage.
- Store in a dry place away from direct sunlight.
- Do not store PPE near radiators. Permanent exposure to temperatures below 0 °C or above +50 °C have a negative impact on the strength of the textile material and shorten the life span.
- Do not allow PPE to come into contact with aggressive substances (e.g. oils, grease, acids, chemicals). Precision mechanics oils may be applied to moving metallic parts during maintenance. Always ensure that textile PPE components do not come into contact with the oil.
- Do not store personal protective equipment close to aggressive substances (see above) because even the vapours of aggressive substances can have a negative effect on the strength of the PPE.
- Protected storage in the device case or device bag.

TRANSPORT

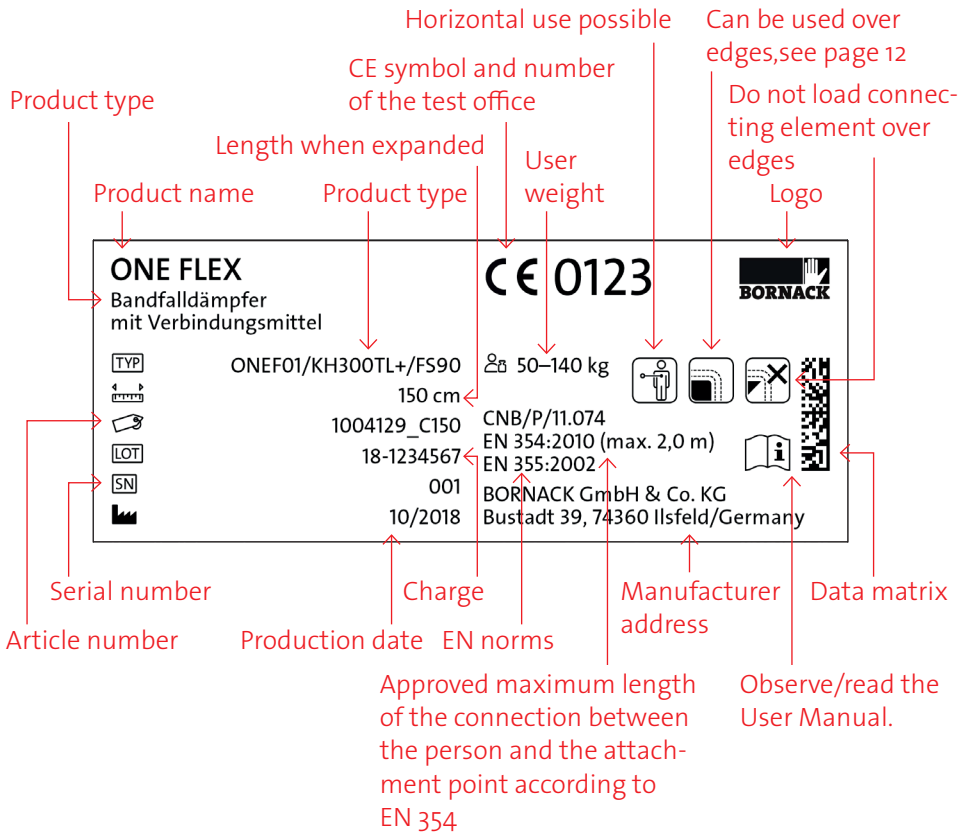
- Protected transport in the device case or device bag.

OTHER

PRODUCT IDENTIFICATION

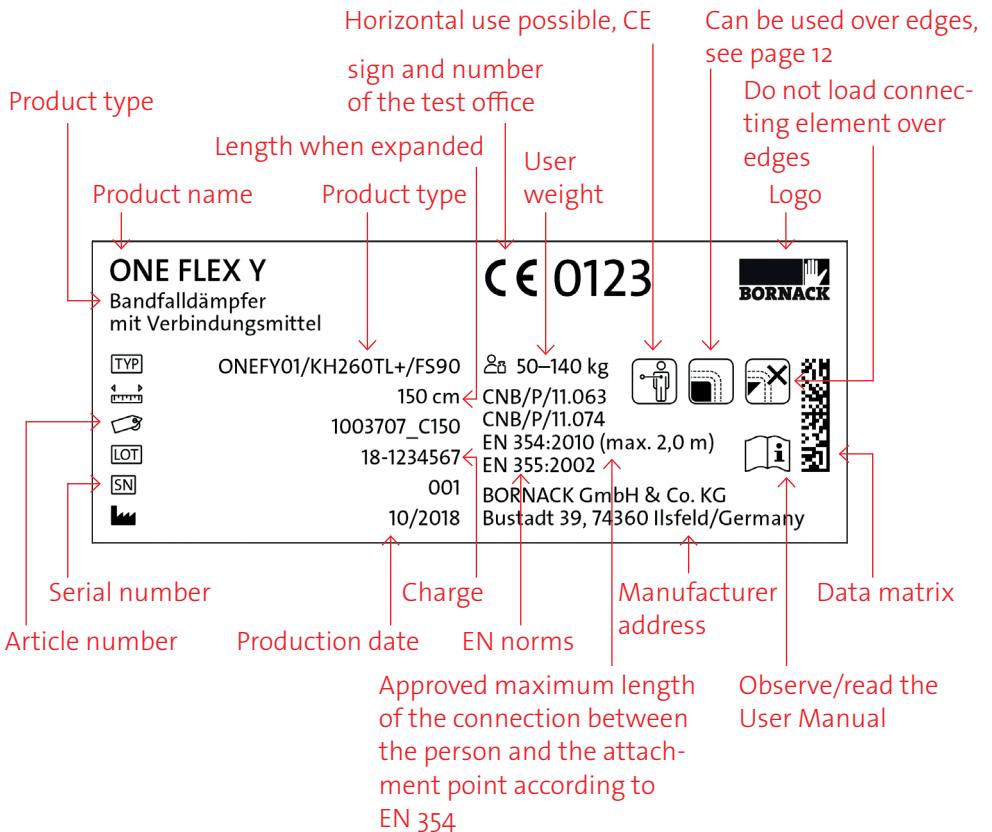
The following identification is on the product:

Identification ONE FLEX:



OTHER

Identification ONE FLEX Y:



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

Energy absorber with integrated lanyard
ONE FLEX

- 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 354:2010 EN 355:2002 CNB/P/11.074
CNB/P/11.063 (only ONE FLEX Y)

- is identical to the PPE that is the object of the
EU type-examination certificate
No. P5A 040506 0271 Rev. 00

issued by

TÜV SÜD Product Service GmbH
Zertifizierstelle
Ridlerstraße 65
80339 München
Germany
CE 0123

- 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

TÜV SÜD Product Service GmbH
Zertifizierstelle
Ridlerstraße 65
80339 München
Germany
CE 0123

28 June 2019

BORNACK GmbH & Co. KG

Klaus Bornack
Managing Director

A handwritten signature in blue ink, appearing to read 'Klaus Bornack', written over a light blue grid background.

TEST CARD

FOR ANNUAL MONITORING

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

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

Type ONE: _____

Production date: _____

Charge: _____ Serial no.: _____

Purchase date: _____

Date of first use: _____

Life span ends at the latest: _____

	Date	Signature	Next inspection	Reason for inspection
1. year				
2. year				
3. year				
4. year				
5. year				
6. year				
7. year				
8. year				

TEST CARD

FOR ANNUAL MONITORING

Please complete:

× √

Year	1.	2.	3.	4.	5.	6.	7.	8.
Tape energy absorber with a lanyard complete?								
Lanyard undamaged?								
End connections undamaged?								
Connecting elements and their fastener locks undamaged?								
Black aluminium ring undamaged?								
Bag of the tape energy absorber undamaged?								
Zip undamaged?								
Two black loops of the tape energy absorber undamaged?								

Continued on the next page

TEST CARD

FOR ANNUAL MONITORING

Please complete:

×	√
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Year	1.	2.	3.	4.	5.	6.	7.	8.
Tape energy absorber not ripped?								
Are the tapes of the tape energy absorber zigzagged (see page 5) stowed in a bag and with no signs of damage?								
Seam patterns of the tape energy absorber undamaged?								
Energy-absorbing weaving of the white tape undamaged?								
Identification legible?								
User Manual available?								
OK								
Blocked								



FALLSTOP

Safety equipment for securing and rescuing at heights and depths

SAFEPOINT

Permanently installed safety systems for architects and industry

BORNACK GmbH & Co. KG

Bustadt 39
74360 Ilsfeld
Germany

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

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Status: 06/2021 GAL Art.-Nr. 8000175_EN anh

