



## evoc E-RIDE 16 Built in Back Protector Instruction Manual

[Home](#) » [evoc](#) » evoc E-RIDE 16 Built in Back Protector Instruction Manual 



FR ENDURO E-RIDE 16  
FR TRAIL E-RIDE 20  
FR TOUR E-RIDE 30  
INSTRUCTION MANUAL





Materials and protective function have been tested and certified according to the regulation EU 2016/425 for personal protective equipment (PPE), category 2.



Carefully read operating instructions before use and keep them for the duration of use!

## Contents

- 1 PURPOSE | AREA OF APPLICATION**
- 2 SAFETY INFORMATION**
- 3 CHOOSING THE RIGHT SIZE | OVERVIEW**
- 4 ASSEMBLY | COMPONENTS**
- 5 CORRECT POSITIONING OF BATTERY AND CHARGER**
- 6 POSITIONING AND ATTACHING THE BATTERY**
- 7 POSITIONING AND ATTACHING THE CHARGER**
- 8 CHECK BEFORE EACH USE**
- 9 CORRECT FIT | ADJUST BACKPACK**
- 10 CHECK AFTER EACH FALL OR IMPACT**
- 11 CARE AND STORAGE**
- 12 INFORMATION ON SERVICE LIFE | SPARE PARTS**
- 13 EXPLANATION OF PICTOGRAPHS AND SYMBOLS**
- 14 LABELLING**
- 15 Documents / Resources**
  - 15.1 References**

## PURPOSE | AREA OF APPLICATION

The EVOC backpack with built-in back protector is designed exclusively for use when riding a Pedelec bike with a maximum speed of 25 km/h.

You can store and transport a rechargeable lithium ion battery of the following popular brands in the backpack: BOSCH, YAMAHA, SHIMANO, BROSE, FAZUA; the battery can be removed or taken out of the bicycle frame. The battery's dimensions must not exceed: 460 mm, height: 90 mm and width: 90 mm. During the ride, a charger can be firmly stored inside the backpack. The charger's dimensions must not exceed: 200 mm, height: 80 mm and width: 80 mm.

The centrally positioned fastening devices ensure that the equipment is held firmly in place in the backpack. This prevents them from moving around in the backpack while cycling and obstructing the user.

Cycling and mountain biking with the assistance of an electric motor and descents in alpine terrain come with risks. The EVOC Backpack with integrated back protector is designed to reduce the risk of serious injury in the event of a fall when engaging in these activities.

The EVOC Backpack with integrated back protector is made for a temperature range from -10°C to +40°.

## SAFETY INFORMATION



### RESTRICTIONS ON USE / EXCLUSION

The EVOC Backpack with integrated back protector has been designed and certified specifically for the sports described in section Purpose / Area of application. Excluded from this are events in the extreme range of these sports. This backpack is not suitable for sports other than those mentioned above, in particular not for the use in motor sports or with motor vehicles such as motorcycles, snowmobiles, quads or similar vehicles.

Protection against all injuries cannot be guaranteed. This includes twisting, overstretching or compression, as well as spine compression fractures.

The EVOC backpack with built-in back protector cannot protect the battery or the charger from damage, and it cannot protect the user from injuries caused by the ion lithium battery and/or the charger.

The EVOC backpack with built-in back protector cannot protect against overheating, combustion, melting and explosions, and it cannot prevent leakage of harmful gases or of liquid from the lithium ion battery or the charger.

### IMPORTANT INFORMATION

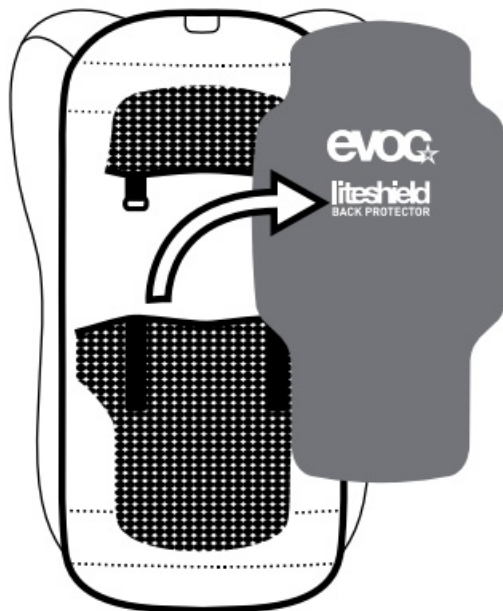
The EVOC Backpack with integrated back protector can reduce the severity of injury from impact only if the back protector is correctly positioned in the designated compartment. Ensure that the back protector is located in the compartment provided for this purpose and is secured with the fastening straps. No changes may be made to the backpack in order not to impair its protective effect.



PLEASE NOTE! The EVOC Backpack with integrated back protector is made for a temperature range from -10°C to +40°. Please note that outside this temperature range protection can be impaired.


### CORRECT INSERTION OF THE PROTECTOR

Insert the protector, positively locked, with the flat, unprinted side facing the back. You have inserted the protector correctly if the imprint can still be seen.




- Make sure that the backpack is not too high or too low on your back. Tighten shoulder straps, chest strap and hip belt.
- On longer rides in the rain, the backpack should be protected with a rain cover to prevent moisture from getting in.
- Before using the lithium ion battery and the charger, the user must make sure they are not wet, and dry them if necessary.
- The user must read the safety information for the lithium ion battery and the charger on the websites of the battery manufacturer and the e-bike brand.
- No other pointy and/or sharp objects must be placed in the compartments for the lithium ion battery and the charger that could damage the lithium ion battery or the charger.
- Before each use, make sure that all straps, velcro fasteners, buckles and plug fasteners are tight.
- Make sure that all objects that could damage the protector and/or the lithium ion battery and the charger are not loose inside the backpack. Protect pointy and/or sharp objects properly (with a tool bag, protective cover for crampons, knife case, caps for sticks etc.) and pack them such that they point away from the body and are

separate from the lithium ion battery and the charger.







- Protect the lithium ion battery and the charger against heat, fire and immersion into water.
- Keep the unused lithium ion battery away from paper clips, coins, keys, nails, screws and other small metal objects that could make a connection from one terminal to another. A short-circuit between the battery terminals can cause burns or a fire.
- Treat the backpack, the lithium ion battery and the charger with care. Do not drop the objects and do not expose them to hard impacts. This can cause the lithium ion battery to heat up or catch fire, which can lead to injury or damage to property. During charging, the lithium ion battery and the charger have to be removed from the backpack.
- Please note that a backpack containing heavy objects may have a negative impact on the sports activity.
- Do not carry any glass bottles or explosive objects (such as gas cartridges and pressure containers) or highly flammable and corrosive liquids in the backpack.
-  PLEASE NOTE: Please be advised that any alteration, repositioning, improper handling, storage or cleaning of the protector may impair and dangerously reduce the protective function of the protector.

## CHOOSING THE RIGHT SIZE | OVERVIEW

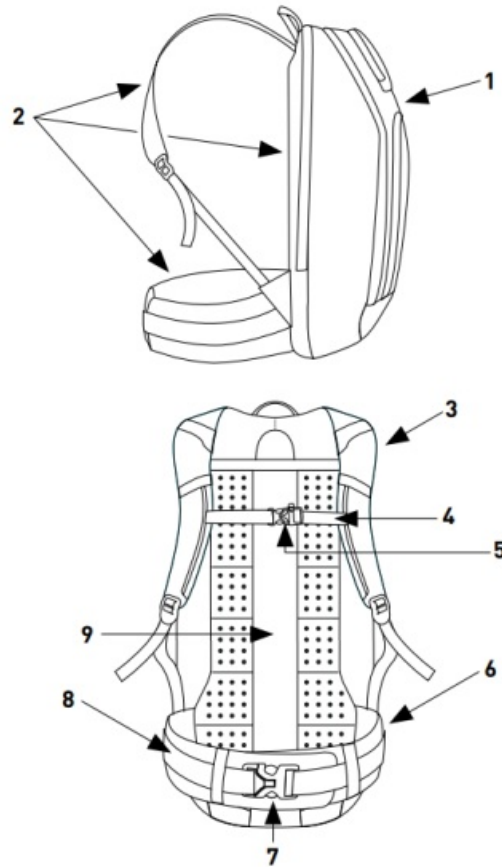
The size of the EVOC Backpack with integrated back protector must be chosen based on torso length and body size in order to be able to fulfil its protective function. Please observe the size chart below. One size cannot be suitable for all body dimensions (height and shape)

 PLEASE NOTE! A backpack that is too large can interfere with the helmet and result in dangerous riding conditions.

EVOC Sports GmbH cannot be held liable for any damage that results or has resulted from using a backpack of the wrong size.

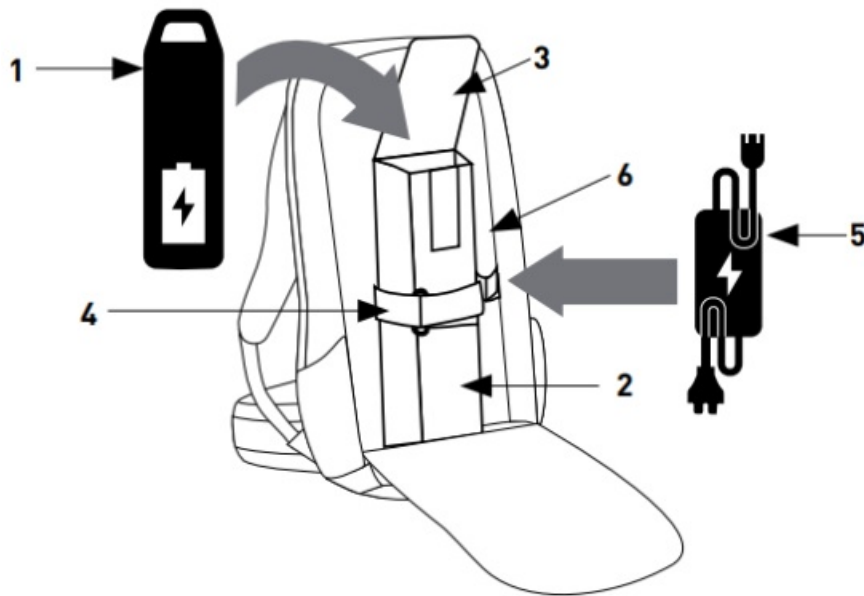
	<b>S</b> <b>Torso length</b> 38 cm - 42 cm <b>Body size</b> 155 cm - 170 cm	<b>EVOC size</b> 
	<b>M/L</b> <b>Torso length</b> 44 cm - 48 cm <b>Body size</b> 170 cm - 192 cm	<b>EVOC size</b> 
	<b>XL</b> <b>Torso length</b> 49 cm - 53 cm <b>Body size</b> 192 cm - 200 cm	<b>EVOC size</b> 

## ASSEMBLY | COMPONENTS



1. Backpack volume
2. Carrier system + back section incl. protector
3. Shoulder strap adjustable
4. Height adjustable chest strap
5. Chest strap plug fastener
6. Flexible hip belt
7. Hip belt plug fastener
8. Hip belt strap – adjustable
9. Litheshield back protector (internal)

## CORRECT POSITIONING OF BATTERY AND CHARGER



1. Lithium ion battery
2. Battery compartment
3. Cover flap with velcro fastener
4. Battery attachment strap
5. Charger
6. Charger attachment strap

## POSITIONING AND ATTACHING THE BATTERY

The lithium ion battery must be placed in the designated, centrally positioned battery compartment. This is marked with the words "BATTERY PACK".

The cover flap of the battery compartment must be secured with the velcro fastener while wearing the backpack. In addition, the surrounding strap of the battery must be firmly in place, taut and fastened with the velcro fastener.

## POSITIONING AND ATTACHING THE CHARGER

A strap fastener holds one charger and holds it in place. Sufficient protection can only be ensured if the charger is in this position, the strap firmly encloses the charger, the strap is taut and the velcro fastener is closed. The correct position is marked with the word "CHARGER".

## CHECK BEFORE EACH USE

Before each use, make sure that the backpack and the protector are fully functional. Proceed as follows.

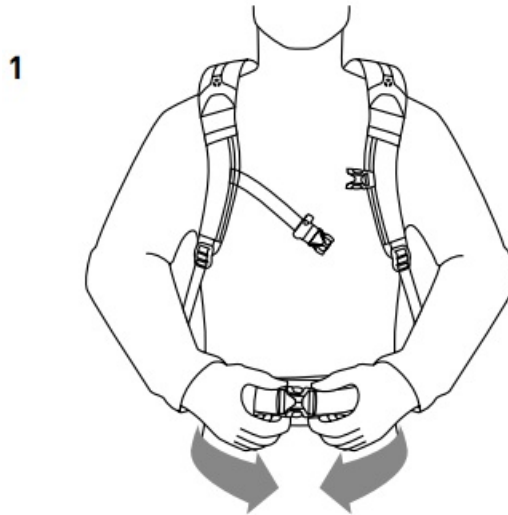
- Make sure the protector shows no mechanical damage and that it is in the intended compartment secured by the fastening straps.
- Check how the backpack is packed. Heavy items should be at the bottom; pointed or sharp objects should be wrapped up additionally and positioned such that they point away from the body.
- Make sure that the content of the backpack is sufficiently secured and stays in place.
- Make sure that the backpack is properly closed with all plug fasteners and zips and that they are all in proper working order.
- Make sure that all main seams are undamaged.

- Check the tensile strength of the stitches of the shoulder straps and hip belts.
- Make sure none of the straps or belts have any tears or other structural damage.

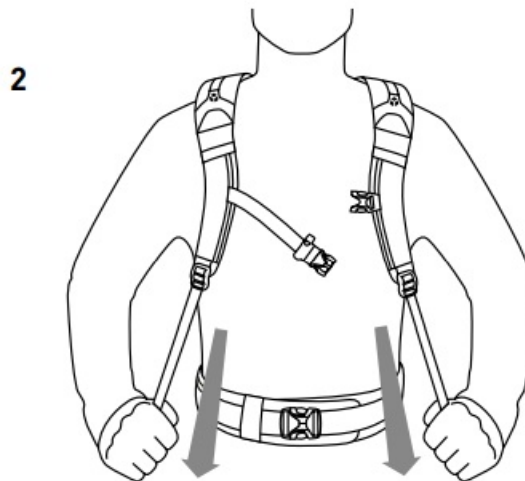
## **CORRECT FIT | ADJUST BACKPACK**

The back protector only provides protection of the areas covered by it in accordance with EU regulation 2016/425. This protection is only guaranteed when the EVOC backpack with integrated back protector is in the right and intended position.

1. Put on the backpack with shoulder strap, chest strap and hip belt loosened. Place the flexible hip belt on the hip bone and close the hook and loop fastener. Now close the hip belt plug fastener and pull the hip belt until it fits snugly.

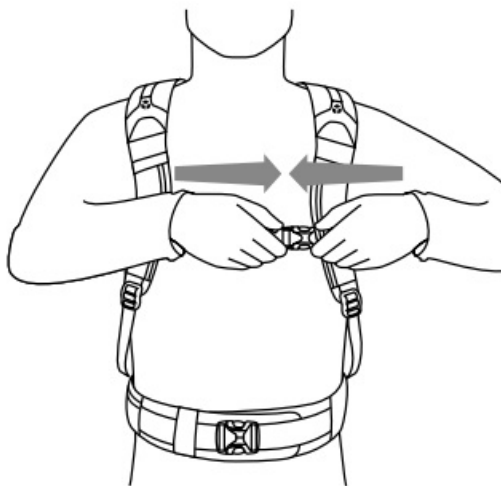


2. Tighten the shoulder straps, making sure that you tighten the backpack only until the padded back section lies vertically and horizontally centred against the back. The hip belt must not move up from the hip.



3. Adjust the height-adjustable chest strap such that it is above the chest. Close the plug fastener of the chest strap and tighten it such that the backpack fits as tightly and snugly as possible on the back.

3



## CHECK AFTER EACH FALL OR IMPACT

After each impact or fall, make sure that the backpack and the protector are fully functional. Pay particular attention to ensure there is no mechanical damage to the protector, the straps and belt, the seams and the plug fasteners. If in doubt, stop using the backpack and contact EVOC Sports GmbH immediately. The protector can be replaced after a fall; it is available as a spare part from our sales partners or directly via EVOC.

Contact: [service@evocsports.com](mailto:service@evocsports.com)

## CARE AND STORAGE

- Avoid extreme soiling and clean the backpack regularly to ensure its proper function.
- The protector should be removed from the backpack before cleaning and inserted into the designated compartment only once it has been cleaned and dried.
- The protector itself does not require any special cleaning; if cleaning is absolutely necessary, it should only be cleaned by hand using fresh water no hotter than 30° and no detergent.
- The protector must be dried in the air without any additional heat sources.
- Clean the backpack by hand with fresh water no hotter than 30°C.
- Only use gentle detergents (natural soap).
- Leave the backpack to air dry.
- Do not dry it mechanically or use mechanical heat sources.
- Please note that machine washing voids all warranty claims.
- Store the dry backpack and protector in a cool, dry and dark place.
- Do not expose the backpack and protector to UV radiation or moisture in the place of storage.
- Keep the backpack and protector away from caustic or aggressive agents.

## DISPOSAL

The backpack does not contain any hazardous or harmful substances. However, it is made from various plastic composite materials which cannot be separated. Dispose of the backpack in accordance with local regulations.

## INFORMATION ON SERVICE LIFE | SPARE PARTS

Improper care, heavy soiling and dirt, incorrect use or environmental influences have an effect on the wear and tear and thus on the service life of the backpack and the protector. Prolonged exposure to light, extreme temperatures or chemical contamination have a particularly negative effect.



It can have adverse effects on material quality, and the functionality of the plug fasteners and hook and loop fasteners.

Replace the backpack/protector after 5 years of service life from the date of production to guarantee its continued functionality. The production date (month and year) can be found on the label inside the backpack/on the protector. The protector is available as a spare part from our sales partners or directly via EVOC. Plug fasteners and other spare parts are available from the sales partners in your country on request.

## LIABILITY

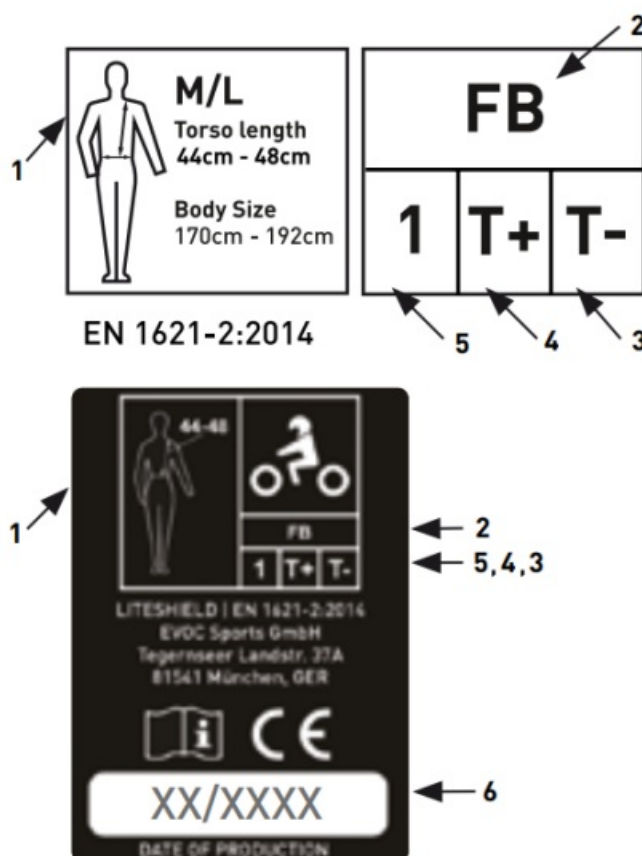
EVOC Sports GmbH is not liable for damages, injuries or death caused by improper use, repairs by unauthorised persons or the use of non-original spare parts. EVOC Sports GmbH is not responsible for any direct, indirect or accidental consequences or any other type of damage that occurs during the use of its products or that result from their use.

## RESULT OF IMPACT DAMPING

Impact absorption 1- 5 impact points

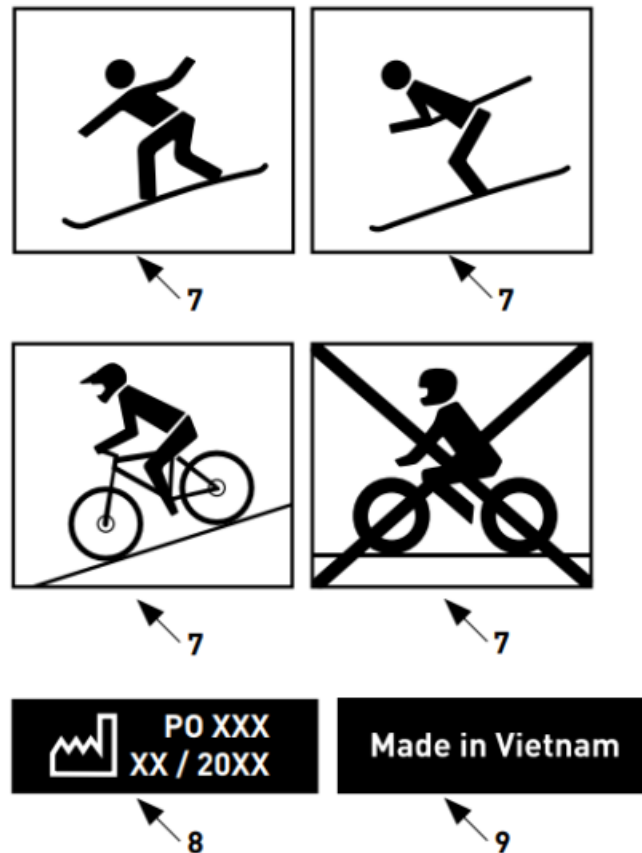
	Mean value	Peak value
Environment	11.6 kN	12.6 kN
Moisture	11.5 kN	11.8 kN
Heat (+40°C)	13.8 kN	14.7 kN
Cold (-10°C)	11.4 kN	12.2 kN

## EXPLANATION OF PICTOGRAPHS AND SYMBOLS



1. Torso length, size range to select the right protector (distance from waist to shoulder)

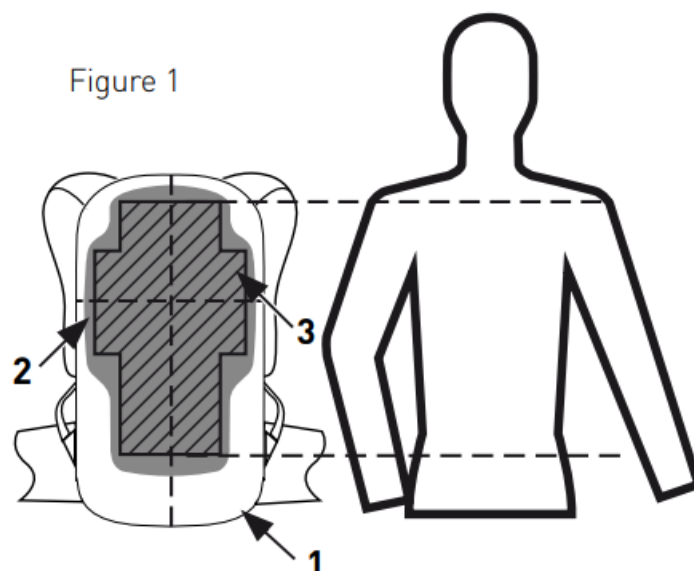
2. Protector category and type: Total back area
3. Impact test at low temperature of -10°C passed
4. Impact test at low temperature of +40°C passed
5. Performance level of impact damping is fulfilled
6. Production date



7. PSA – personal protective equipment for skiing, snowboarding, mountain biking. Motorcyclists excluded. (ISO 7000-2618)
8. Production number (PO#) and production date (🏭)
9. Country of manufacture

Figure 1

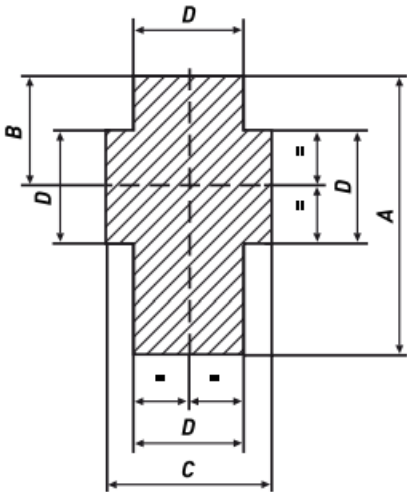
Dimensions and location of the protected zone in relation to the coverage area of the entire product.



- 1. Backpack
- 2. Back protector
- 3. Minimum protected zone

Table 1 — Dimensions of the minimum protected zone for back protectors

Figure 2 — Minimum dimensions of protected zones



Dimensions in Figure 2

A	B	C	D
72%	29%	44%	29%

PLEASE NOTE: All dimensions refer to the waist-shoulder distance (100%) of the largest user

**LABELLING**

Manufacturer LITESHIELD back protector Manufacturer FR TOUR E-RIDE 30 / FR TRAIL E-RIDE 20 / FR ENDURO E-RIDE 16 backpack  
EVOC SPORTS GMBH  
Tegernseer Landstr. 37A  
81541 Munich  
Germany

**Notified body:**  
TÜV Rheinland LGA Products GmbH  
Tillystr.2  
90431 Nürnberg  
Deutschland  
Notified Body: 0197

Materials and protective function of the FR TOUR E-RIDE 30 / FR TRAIL E-RIDE 20 / FR ENDURO E-RIDE 16 were tested and certified according to EU Regulation 2016/425 for personal protective equipment (PSA), category 2.  
Declaration of conformity to download: [www.evocsports.com](http://www.evocsports.com).

## THE EVOC STORY

In the last 20 years we have travelled to more than 50 destinations in search of the best trails and the most stunning powder runs.

It was particularly hard to find backpacks and bags on the market that met our requirements in regards of functionality, protection and quality. So our solution was to make them ourselves.

Since 2008 EVOC stands for evolution and the concept of high-quality, sports backpacks, bags and luggage – with a special focus on protection.



## EVOC – PROTECTIVE SPORTS PACKS

All EVOC products are engineered in Germany to ensure the highest standards of performance, durability and quality.

## WARRANTY INFORMATION

[www.evocsports.com/service/warranty](http://www.evocsports.com/service/warranty)



## LEARN MORE ABOUT THIS PRODUCT




<https://qrstud.io/2qi3id8>




[www.evocsports.com](http://www.evocsports.com)

## Documents / Resources

	<p><a href="#">evoc E-RIDE 16 Built in Back Protector</a> [pdf] Instruction Manual FR ENDURO E-RIDE 16, FR TRAIL E-RIDE 20, FR TOUR E-RIDE 30, E-RIDE 16 Built in Back Protector, E-RIDE 16, Built in Back Protector, Back Protector, Protector</p>
---	---

## References

-  [Bike-backpacks and sports equipment with climate-neutral shipping](#)
- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.