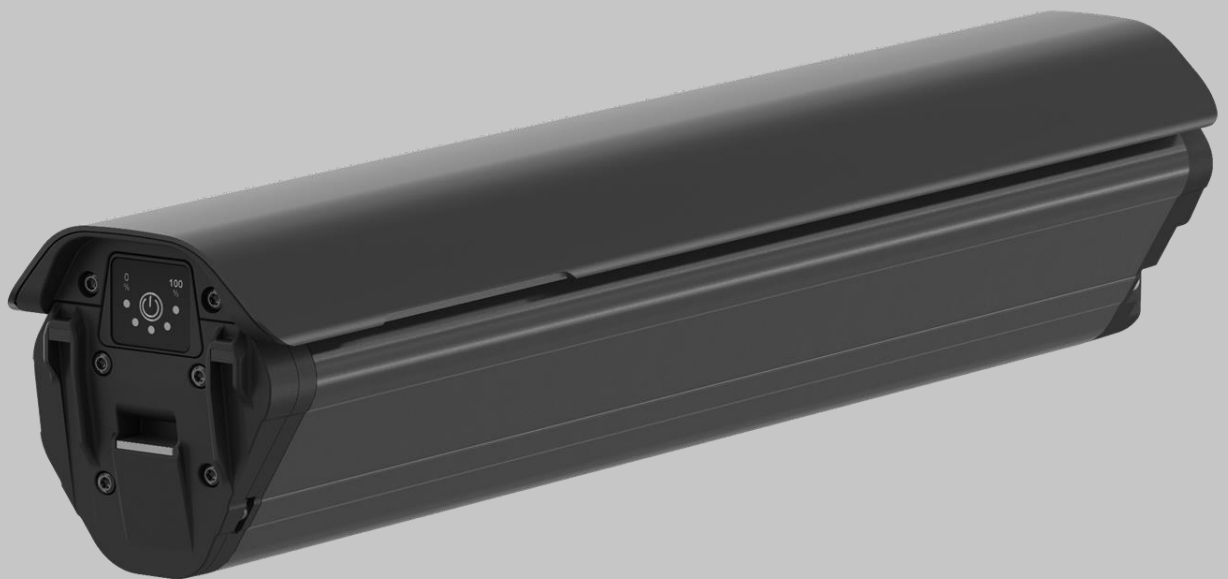


# DOWNTUBE BATTERY V10, K1

## Original Operating Instructions



E-MOBILITY



DRIVE  
SYSTEMS



ENERGY STORAGE  
SYSTEMS



POWER- AND  
GARDENTOOLS



INDUSTRIAL



MEDICAL

## IDENTIFICATION

### PRODUCT

Model: Downtube battery V10  
Item No. 606326  
Country of origin: Germany  
Sign: CE

### MANUFACTURER

BMZ GmbH  
Zeche Gustav 1  
63791 Karlstein am Main  
Germany  
Tel. No.: +49 (0) 6188 9956-0  
Fax: +49 (0) 6188 9956-900  
E-mail: mail@bmz-group.com  
Web: www.bmz-group.com

### CUSTOMER SERVICE


BMZ Service Center  
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63791 Karlstein am Main  
Germany  
Tel. No.: +49 (0) 6188 9956-9833  
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E-mail: cs.ebike@bmz-group.com  
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### DOCUMENT

Original operating instructions Downtube Battery V10  
Version: 1.0  
Status: 15.01.2021  
Subject to alterations.

## IMPORTANT NOTES ON THE OPERATING INSTRUCTIONS




These instructions are intended for end users.

 <b>WARNING</b>
<b>Before using the battery, read these instructions carefully.</b>
<b>Errors in observing the safety notes and instructions can cause fire, explosion and/or serious injury.</b>

Keep the instructions accessible to all users of the battery and pass them on to the next owner.

The instructions do not contain any information on the operation of the complete system (battery + engine + control unit).

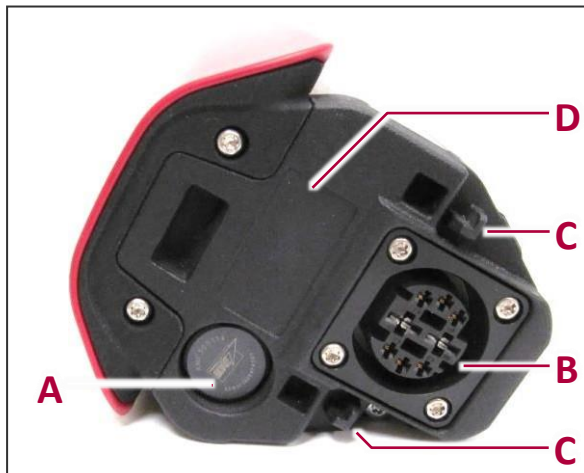
### EXPLANATIONS TO THE DEPICTION

SYMBOL	MEANING
 <b>WARNING</b>	Failure to observe can result in serious injury or death. Medium risk level.
 <b>CAUTION</b>	Non-observance can lead to minor or medium serious injuries. Low risk level.
<b>ATTENTION</b>	Non-observance can lead to damage to property.
	Tips, further information.

## 1 PRODUCT DESCRIPTION

### 1.1 OVERALL VIEW

- A Pressure equalization membrane
- B Connection socket
- C Coding
- D Burst protection
- E Charge status display with button
- F Guarantee seal
- G Type plate



### 1.2 USE IN ACCORDANCE WITH REGULATIONS

The battery supplies the drive system of the e-bike. It may only be used with the Shimano drive system.

Any other use is not permitted in accordance with the intended use. The warranty becomes void if the product is not used for its intended purpose.

If the guarantee seal is defective or missing, the warranty and guarantee become void.

### 1.3 COMPATIBLE CHARGERS

→ BMZ Item No. 606329

### 1.4 TECHNICAL INFORMATION

#### 1.4.1 PERFORMANCE DATA

ITEM NO.	606326
Capacity (nominal)	20 Ah
Energy	725 Wh
Voltage nominal	36 V
Weight	ca. 3.7 kg
Energy consumption active	200 mW
Energy consumption inactive	0.7 mW

#### 1.4.2 ENVIRONMENTAL CONDITIONS

OPERATIONAL STATUS	CONDITION
Charging	0...45 °C
Discharging	-20...55 °C
Storage	-20...45 °C (10...25 °C recommended) The storage must be well ventilated. Humidity: 0...80 %

### 1.5 CHARGE STATUS DISPLAY

The charging status is briefly displayed by pressing the button. When the battery is inserted, the charge status can only be read via the control unit.



IMAGE 1: LED DISPLAY AND BUTTONS

**ERROR! USE THE HOME TAB TO APPLY ÜBERSCHRIFT 1 TO THE TEXT THAT YOU WANT TO APPEAR HERE. ERROR!**  
**USE THE HOME TAB TO APPLY ÜBERSCHRIFT 1 TO THE TEXT THAT YOU WANT TO APPEAR HERE.**

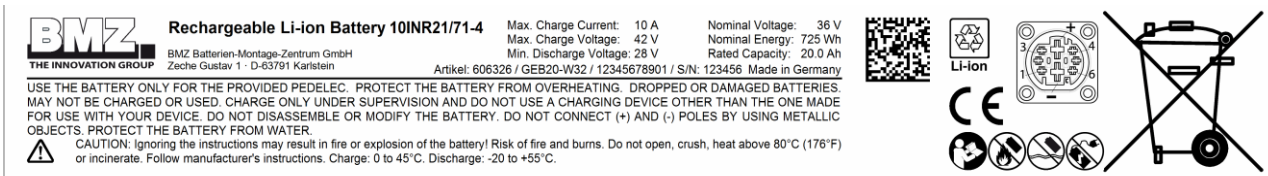


IMAGE 2: EXAMPLE OF TYPE PLATE

**EXPLANATIONS OF SYMBOLS**

SYMBOL	MEANING
●	LED on
○	LED off
*	LED flashes

**CHARGING STATUS DISPLAY**

LED 1, 2, 3, 4, 5	CHARGING STATUS
●●●●●	100...80 %
●●●●○	79...60 %
●●●○○	59...40 %
●●○○○	39...20 %
●○○○○	19...10 %
*○○○○	9...0 % Recharge after two days at the latest to avoid permanent damage.

**1.6 IDENTIFICATION**

For the position of the type plate, see section 1.1. Inscription see figure 2, page 4.

**EXPLANATION OF SYMBOLS**

SYMBOL	MEANING
	General warning sign
	Do not throw into the fire.
	Do not immerse in the liquid.
	Do not charge defective batteries.

SYMBOL	MEANING
	Follow the instructions.
	Symbol for lithium-ion battery (contains recyclable material)
	Compliant with the relevant European directives.
	Do not dispose of in household waste.

**2 SAFETY**

Lithium-ion batteries can burn and explode if misused. Observe all safety notes and instructions to minimize the risk.

**2.1 SAFETY INSTRUCTIONS**

- Only operate the battery and accessories when they are in perfect condition.
- Do not use defective or damaged batteries.
- Only use batteries that are approved for your e-bike.
- Only use the battery with the intended e-bike system. This is the only way to protect the battery from dangerous overloading.
- Charge the battery before use. Only use compatible chargers.
- Only connect compatible chargers to the charging port of the e-bike.
- Keep the battery and contacts clean and dry. Clean contacts with a dry brush if dirty.

- Do not clean the battery with solvents (i.e. dilution, alcohol, oil, corrosion protection), cleaning agents or water jets.
- Persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge must not use the battery pack; unless they are supervised or instructed in the use of the battery by a person responsible for their safety.
- Do not expose the battery to strong mechanical shocks. There is a risk of damaging the battery.
- Ensure that children do not play with the battery.
- Never open or disassemble the battery.
- Do not short-circuit the battery.
- Do not change or manipulate the battery, contacts and charging port on the e-bike.
- Keep burst protection and pressure equalization diaphragm free.
- Observe environmental conditions.
- Avoid large temperature changes.
- Protect the battery from the heat above 80°C, e.g. also from permanent sunlight and fire. Excessive temperatures can cause liquid to leak from the battery and damage the battery casing. Avoid contact with the liquid.
- Wipe up leaked electrolyte liquid with an absorbent piece of cloth. In case of large release, wear protective clothing, gas mask against organic gases, safety goggles and protective gloves.
- Do not immerse the battery in liquids.
- Do not use the battery with a defective connection cable or defective contacts.
- Remove the battery from the e-bike if it is not going to be used for a long time.

## 2.2 EMERGENCY INFORMATION

### 2.2.1 FIRST AID MEASURES

Mechanical, thermal or electrical misuse can cause chemicals and toxic gases to escape. Symptoms obviously caused by inhalation or ingestion of combustion gases or eye or skin contact

require medical help.

#### AFTER INHALATION

Ventilate immediately or get fresh air, in worse cases call a doctor immediately.

#### AFTER SKIN CONTACT

Wash skin thoroughly with soap and water.

#### AFTER EYE CONTACT

There may be irritation to the eyes. Immediately rinse eyes thoroughly with water for 15 minutes, then seek medical help.

#### AFTER INGESTION

If the contents of an opened cell are swallowed, do not feed anything by mouth if the person rapidly becomes unconscious, is unconscious or has seizures. Rinse the mouth thoroughly with water. Do not induce vomiting. In case of spontaneous vomiting, place the affected person in a forward bending position to reduce the risk of choking. Rinse the mouth again with water. See a doctor immediately.

### 2.2.2 FIRE-FIGHTING MEASURES

#### WARNING

Fire gases can cause damage to health. Extinguishing water can react to form highly toxic gas.

- Avoid inhalation of gases at all costs.
- Place on the side of the fire from which the wind blows. If this is not possible, wear self-contained breathing apparatus and appropriate protective clothing.

1. Alert the fire brigade and report lithium fire.
2. Evacuate all persons from the immediate fire area.
3. Use dry chemicals, CO<sub>2</sub>, water spray or commercial foam to fight the fire.

## 3 OPERATION

### 3.1 BEFORE THE FIRST USE

- Make a note of the number engraved in the key so that a replacement key can be ordered if it is lost.

### 3.2 INSERT THE BATTERY

1. Lock the lock.



2. Plug the battery socket onto the connector of the mounting.



3. Click the battery in the lock.



4. Remove the key.



Check that the battery is firmly engaged.

### 3.3 REMOVE THE BATTERY

1. Unlock the lock.



2. Lift the battery by the indentation, then remove it to the rear.



### 3.4 SWITCHING THE BATTERY ON AND OFF

The battery is switched on and off together with the e-bike system via the control panel.

Alternatively: To switch on, press the button on the battery; to switch off, press and hold the button on the battery.

The battery switches off automatically when not in use.

### 3.5 CHARGE THE BATTERY

#### CAUTION

Only a compatible charger may be connected to the charging port.

Do not connect any other devices.

Observe the instructions in the operating manual of the charger.

The battery can be charged directly or via the charging port on the e-bike.

After charging, push the cover of the charging port on as far as it will go.



If the battery cannot be charged or is damaged, do not use it and contact your e-bike dealer.

Depending on the charging status, the top LED flashes:

LED 1, 2, 3, 4, 5	CHARGING STATUS
*○○○○	0...19 %
●*○○○	20...39 %
●●*○○	40...59 %
●●●*○	60...79 %
●●●●*	80...99 %
●●●●●	100 %

CHARGE STATUS DISPLAY DURING CHARGING

### 3.6 FAULTS AND ERRORS

ERROR	POSSIBLE SOLUTION
All LEDs flash followed by error code	Battery is faulty. Please contact your specialist retailer.
One LED flashes	Charge the battery.
Battery does not work	→ Switch on via the button. → Battery too cold: Place in a warm environment. → Battery too warm: Let cool down. → Battery deeply discharged due to incorrect storage. Contact your retailer.
Not enough range	→ Low ambient temperature: Less range in cold weather is normal. → Loss of capacity due to incorrect storage or natural ageing: Replace the battery.

If no suitable solution is listed, please contact your dealer.

## 4 MAINTENANCE AND CLEANING

The battery is maintenance-free.

If necessary, clean it with a dry or slightly damp cloth.

## 5 STORAGE

### SAFETY INSTRUCTIONS

- Do not store the battery near hot or flammable objects. There is a danger of explosion.
- Do not store the battery near heating devices and avoid direct sunlight.
- Store the battery in a dry place, away from open flames and food.
- Keep small metal objects away from the unused battery. These could cause bridging of the contacts.
- Store the battery with a charge level of approx. 50%. Check the charge level after three months and recharge to approx. 50% if necessary.
- Observe ambient conditions.

## 6 TRANSPORT

### 6.1 SHIPPING

The battery is considered dangerous goods and may only be packed and shipped by trained persons. Contact your dealer about this.

### 6.2 TRANSPORTATION BY ROAD

Private users are allowed to transport the battery on the road without conditions.

Commercial users and third parties carrying out the transport must comply with the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).

## 7 DISPOSAL

Do not dispose of the battery in household waste! In the EU, the used batteries must be recycled in an environmentally friendly manner. Return the battery to the dealer or to your local collection point.

To avoid short circuits, discharge the battery completely and cover the poles with adhesive tape.

# Do you have questions?

Don't hesitate to contact us, we will be happy to advise you.



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