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# Operating instructions Battery

## KERN YKR-04-EX2

Type TYKR-04-EX2-A

Version 1.0

2025-08

en



en

# KERN YKR-04-EX2

Version 1.0 2025-08

**Operating instructions**

**Battery**

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# 1 Safety

## 1.1 Follow the instructions in the operating manual



Read the operating instructions carefully before installation and commissioning, even if you already have experience with KERN scales.

## 1.2 Staff training

The device may only be operated and maintained by trained personnel.

Planning, installation, maintenance, and repair may only be carried out by qualified personnel with the necessary and up-to-date knowledge of explosion protection. The qualified personnel must also have in-depth knowledge of handling scales.



Please observe EN 60079-14 and any country-specific requirements (Germany: Technical Rules for Industrial Safety TRBS 1203).

## 1.3 Notes on explosion protection

- The explosion-proof battery YKR-04-EX2 is intended for supplying power to the KXC-TM-EX2 evaluation unit and the SXC-EX2 and IXC-EX2 platform scales. Do not connect the battery to other devices.
- The YKR-04-EX2 battery may only be charged with the YKR-05-EX2 charger.
- The YKR-05-EX2 charger must only be operated in a safe area.
- The intrinsically safe battery YKR-04-EX2 may be plugged into and removed from the KXC-TM-EX2 signal conditioning unit in the hazardous area.
- The battery complies with Ex equipment category 3 and may only be used in zones 2 and 22.
- Observe the ATEX guidelines, the applicable standards, and the local safety and accident prevention regulations when selecting, installing, maintaining, repairing, and operating the device.
- Use a damp cloth for cleaning.
- Do not use solvents to clean plastic surfaces.
- Avoid tensile stress on the cable gland.
- The battery may be operated at ambient temperatures Ta of -10 to 40 °C.
- However, the battery must be charged outside the potentially explosive area at Ta from 0 to 40 °C.
- The battery connection socket is protected from dirt by the cap when the plug is not inserted.

## 2 Technical data

| KERN | YKR-04-EX2 |
|---|---|
| Item number / Type | TYKR-04-EX2-A |
| Classification TYKR-04-EX2-A battery | II 3G Ex ic IIC T4 Gc<br>II 3D Ex ic IIIC T80°C Dc |
| Technology | Lithium ion polymer |
| Permissible ambient temperature | -10 °C ... + 40 °C |
| Battery, permissible temperature range during charging | 0 °C … + 40 °C |
| Humidity | max. 80% rel. (non-condensing) |
| Power | 3.7 VDC; 10 Ah |
| Dimensions | 123 x 30 x 105 (W x D x H) [mm]<br>With plug connector |
| Net | 0.85 kg |
| IP protection | IP65 |

## 3 Declaration of conformity

The current EC/EU declaration of conformity can be found online at:

***https://www.kern-sohn.com/shop/de/downloads/***

# 4 Instructions for use

## 4.1 Intended use

The explosion-proof battery YKR-04-EX2 is only intended for supplying power to the KXC-TM-EX2 evaluation unit and the SXC-EX2 and IXC-EX2 platform scales. .

The battery may be replaced in potentially explosive areas. Charging is only permitted in a safe area.

The requirements in the chapter "Technical data " and "Safety " must be observed.

Store the battery in the holder provided for this purpose:



## 4.2 Improper use

Any modifications to the battery are prohibited.

## 4.3 Warranty

The warranty is void if

- failure to observe our instructions in the operating manual
- Use outside the described applications
- Modification of the device or opening of the device
- mechanical damage and damage caused by media, liquids natural wear and tear
- Improper use

# 5 Transport and storage

## 5.1 Inspection upon receipt

Please check the packaging immediately upon receipt and the device upon unpacking for any visible external damage.

## 5.2 Packaging/return transport

- ⇨ Keep all parts of the original packaging for any necessary return transport.
- ⇨ Only use the original packaging for return transport.
- ⇨ Before shipping, disconnect all connected cables and remove all loose/movable parts.

# 6 Unpacking, setup, and startup

## 6.1 Unpacking and inspection

Remove the battery from the packaging and remove the packaging material. Check that all parts included in the delivery are present and undamaged.

Scope of delivery:

- Battery
- Operating instructions

## 6.2 Charging the battery

The battery should be fully charged before first use.

To protect the battery, the automatic switch-off function can be activated in the menu of the evaluation device under <AUtoFF>. (See operating instructions KXC-TM-EX2).

When the battery capacity is exhausted, the display shows <Lo bAt>. Disconnect the battery from the evaluation device and connect it to the charger in a safe place. safe area. The charging time until the battery is fully recharged is approx. 6 hours.

| **Display Charger** | No battery connected | Battery is charging | Battery charged |
|---|---|---|---|

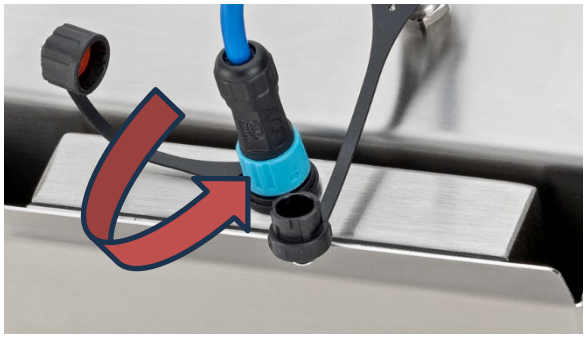
## 6.3 Battery safety instructions

| | |
|---|---|
| **CAUTION**<br><br><br> | ⇨ The battery and charger are designed to work together.<br>⇨ The battery may only be replaced with the same type or a type approved by the manufacturer.<br>⇨ Protect the battery from fire and heat.<br>⇨ Do not allow the battery to come into contact with liquids, chemicals, or salts.<br>⇨ Do not expose the battery to high pressure or microwaves.<br>⇨ Batteries and chargers must not be modified or tampered with under any circumstances.<br>⇨ Do not use a defective, damaged, or deformed battery.<br>.<br>⇨ Do not connect the battery's electrical contacts to metallic objects or short-circuit them.<br>objects and do not short-circuit them.<br>⇨ Fluid may leak from a damaged battery. If the fluid comes into contact with the skin or eyes, it may cause irritation.<br>⇨ If the battery develops odors, becomes hot, discolored, or deformed, disconnect it from the power supply immediately and, if possible, remove it from the scale. |

### 6.4 Replacing the battery

Only replace the battery when the scale is switched off.

1. Unscrew the locking sleeve (blue) and unplug the connector.

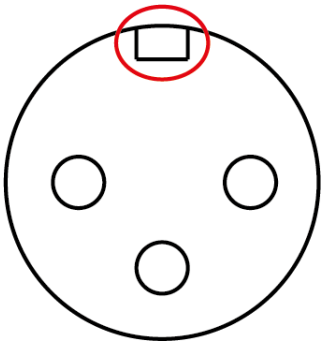


2. Remove the discharged battery from the recess

3. Insert the charged battery into the recess

4. Plug in the connector (make sure the connector tab is in the correct position)

   The plug locks into place automatically.



# 7 Cleaning, disposal

## 7.1 Cleaning

Do not use aggressive cleaning agents (solvents, etc.), only a cloth moistened with mild soapy water. Ensure that no liquid penetrates the device. Wipe with a dry, soft cloth.

Remove spilled material immediately.

## 7.2 Disposal

The disposal of packaging and batteries must be carried out by the operator in accordance with the applicable national or regional regulations at the user's location.

# 8 Minor troubleshooting

| Malfunction | Possible cause |
|---|---|
| The weight display is not lit. | • The scale is not switched on.<br>• The plug is not fully inserted.<br>• The battery is empty. |