

## Operating Instruction Set Lithium-Ion-Battery and Charger

### Series GPB

Nominal Capacity C1:	see Type Label
Nominal Voltage:	see Type Label
Nominal Temperature:	20 °C

**There is no charger included in the delivery. Always only use a charger for lithium-ion batteries with the appropriate charging voltage (see type plate).**



Consider Operating Instruction and place it visible at the place of charge.

Because of lack of applicable standards consider EN 50272-3 and EN 50272-2



Wear safety goggles while working on batteries.



Only use approved transportation and lifting devices.



Dangerous voltage.

Avoid touches and short circuits.

**Attention!** Metal parts and battery the battery itself can have a voltage. Therefore place no foreign parts or tools to the battery.

## 1. Taking into Operation

Check the battery for mechanical damages. The battery connector must be connected safe and with the right polarity. **Otherwise the battery, the vehicle or the charger can be destroyed!** The battery must be recharged.

## 2. Operation

### 2.1 Entladen

The battery can be discharged until the final discharge voltage (see label) is reached. If the final discharge voltage is reached, or if the lowest tolerable voltage of one cell inside the battery is reached, the electronic completes the discharge.

### 2.2 Laden

The battery is charged with the given charge voltage (see label) with constant voltage (CV). **Only use the original charger delivered with the first battery. A charge with a wrong charger can lead into destruction of the battery and cell explosions in the inner of the housing and if so to open fire.**

During the charge the electronic in the battery is balancing the single cells so that an overcharge of single cells is avoided.

## 3. Maintenance

There is no maintenance necessary.

## 4. Care

Batteries have to be kept clean. If cleaning is required this must be carried out by wet cloth only and without any additives like solvents.

## 5. Storage

If the battery must be stored it should be charged to 50 % state of charge (resp. discharged to it). With this measure the battery aging is minimized and the battery withstands the storage without capacity loss.

## Troubles

In case of troubles the customer service must be called.