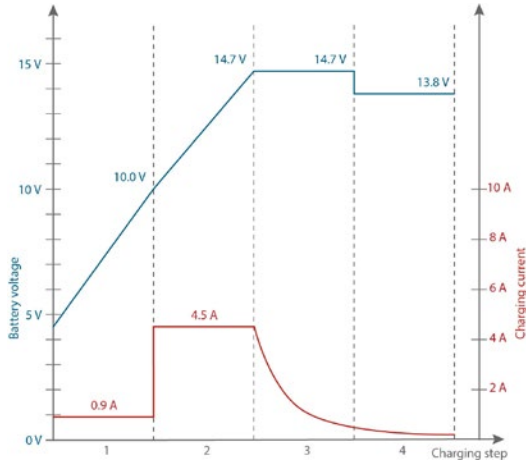
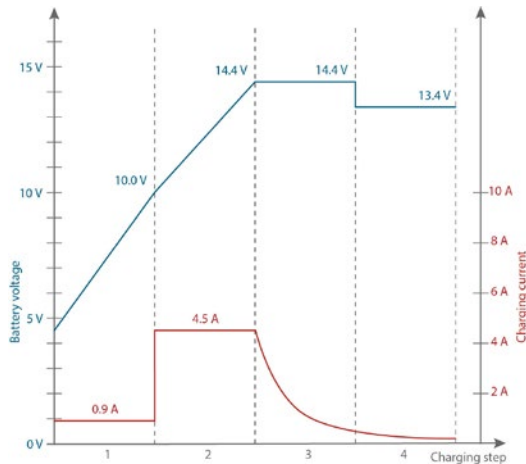


12 V AGM mode - Charging curve and charging method



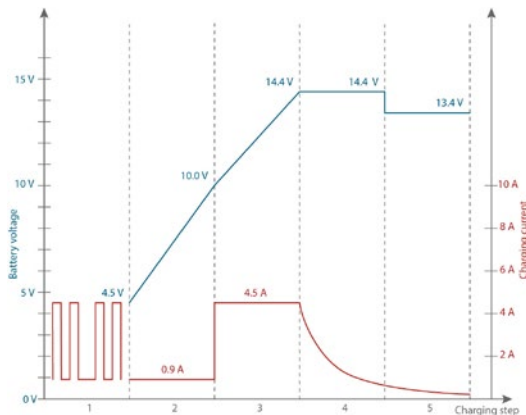
- Step 1** Softstart phase:
Serves to put a deep discharged battery back into a chargeable state. The softstart phase is not necessary if the battery voltage is at least 10.0 V.
- Step 2** Bulk phase:
The battery is constantly charged with max. 4.5 A charging current.
- Step 3** Absorption phase:
Constant voltage charging.
- Step 4** Floating phase:
After reaching the cut-off-voltage (14.7 V), the battery is constantly supplied with current. Capacity losses through self-discharge are compensated immediately.

12 V SLA/Gel mode - Charging curve and charging method



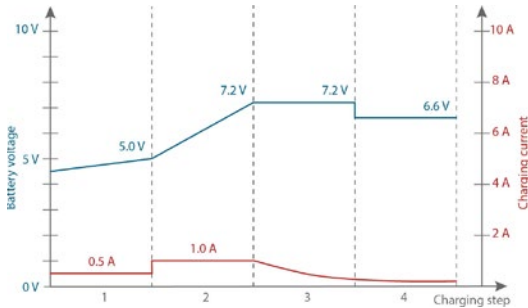
- Step 1** Softstart phase:
Serves to put a deep discharged battery back into a chargeable state. The softstart phase is not necessary if the battery voltage is at least 10.0 V.
- Step 2** Bulk phase:
The battery is constantly charged with max. 4.5 A charging current.
- Step 3** Absorption phase:
Constant voltage charging.
- Step 4** Floating phase:
After reaching the cut-off-voltage (14.4 V), the battery is constantly supplied with current. Capacity losses through self-discharge are compensated immediately.

12 V Lithium mode - Charging curve and charging method



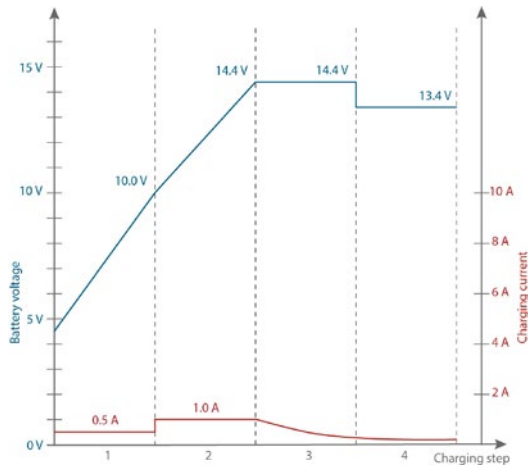
- Step 1** Check phase:
If the battery management system (BMS) is switched off due to low battery voltage, it is reactivated by a control signal from the battery charger. Not until then does the charging process start.
- Step 2** Softstart phase:
Serves to put a deep discharged battery back into a chargeable state. The softstart phase is not necessary if the battery voltage is at least 10.0 V.
- Step 3** Bulk phase:
The battery is constantly charged with max. 4.5 A charging current.
- Step 4** Absorption phase:
Constant voltage charging.
- Step 5** Floating phase:
After reaching the cut-off-voltage (14.4 V), the battery is constantly supplied with current. Capacity losses through self-discharge are compensated immediately.

6 V Motorbike mode - Charging curve and charging method



- Step 1** Softstart phase:
Serves to put a deep discharged battery back into a chargeable state. The softstart phase is not necessary if the battery voltage is at least 5.0 V.
- Step 2** Bulk phase:
The battery is constantly charged with max. 1.0 A charging current.
- Step 3** Absorption phase:
Constant voltage charging.
- Step 4** Floating phase:
After reaching the cut-off-voltage (7.2 V), the battery is constantly supplied with current. Capacity losses through self-discharge are compensated immediately.

12 V Motorbike mode - Charging curve and charging method



- Step 1** Softstart phase:
Serves to put a deep discharged battery back into a chargeable state. The softstart phase is not necessary if the battery voltage is at least 10.0 V.
- Step 2** Bulk phase:
The battery is constantly charged with max. 1.0 A charging current.
- Step 3** Absorption phase:
Constant voltage charging.
- Step 4** Floating phase:
After reaching the cut-off-voltage (14.4 V), the battery is constantly supplied with current. Capacity losses through self-discharge are compensated immediately.

Staudte Hirsch

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