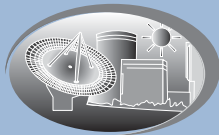
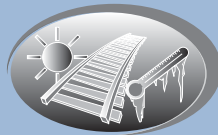




Motive Power Systems



Reserve Power Systems



Special Power Systems



Service

trak[®] bloc

Maintenance free monobloc traction batteries



Similar to the illustration

HOPPECKE trak[®] bloc with new absorbent glass mat (AGM) technology

trak[®] bloc is the new generation of monobloc batteries for traction and cycling applications.

The compact design is ideal for all applications with limited available space. HOPPECKE trak[®] bloc batteries are used specifically in cleaning machines, electrical wheelchairs, electric caddies, boats and caravans. Thanks to the use of the HOPPECKE AGM technology, which received the Innovation Award 2000, the HOPPECKE trak[®] bloc system offers a high level of reliability combined with long life expectancy.



Typical applications for HOPPECKE trak[®] bloc:



Cleaning machines



Electrical wheelchairs



Golf carts and electric caddies



Access platforms



Boats, caravans and leisure uses



With the flexible connection system it is easy to choose the most suitable type of connection.

■ Features of trak[®] bloc:

- Maintenance free traction battery
- Maximum energy density
- Very good resistance to vibration
- Excellent high-current behaviour
- Comprehensive product range
- Variety of connection options

■ Your benefits from trak[®] bloc:

- No topping up with water over the whole life of the battery
- Up to 20% more capacity than similar battery systems of the same volume
- Suitable for extreme conditions of use, especially in electric vehicles, electrical wheelchairs and cleaning machines
- Greater range for vehicles with high power consumption
- Compatible with almost all vehicles on the market
- Flexible battery design (horizontal position)

Product range and technical data

Maintenance free AGM monobloc batteries

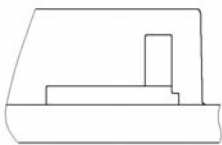
Type	Material number	Nominal voltage (V)	Nominal capacity C ₅ 30°C [AH]	Nominal capacity C ₂₀ 30°C [AH]	L [mm]	W [mm]	H [mm]	Weight [kg]	Terminals	Terminal layout	Pcs. per pallet	Handle
12 TB 50	3210334050	12	50	55	232	177	190	19	2	B	40	yes
12 TB 50	3210334150	12	50	55	232	177	190	19	1	B	40	yes
12 TB 60	3210334058	12	60	65	278	175	190	23	2	B	32	yes
12 TB 70	3210334070	12	70	75	303	177	190	24	2	B	28	yes
12 TB 80	3210334080	12	80	85	342	177	190	28	2	B	24	yes
12 TB 100	3210334101	12	100	110	344	177	230	38	4	A	24	no
12 TB 100	3210334104	12	100	110	344	177	230	38	5	A	24	no
12 TB 100	3210334105	12	100	110	344	177	230	38	3	A	24	no
12 TB 115	3210334115	12	115	130	344	170	275	46	3	A	12	yes
12 TB 115	3210334116	12	115	130	344	170	275	46	5	A	12	yes
12 TB 115	3210334117	12	115	130	344	170	275	46	4	A	12	yes
12 TB 130	3210334130	12	130	150	498	177	230	55	4	A	16	no
12 TB 130	3210334132	12	130	150	498	177	230	55	5	A	16	no
12 TB 130	3210334133	12	130	150	498	177	230	55	3	A	16	no
6 TB 170	3210334170	6	170	185	242	170	275	32	3	C	21	no
6 TB 170	3210334171	6	170	185	242	170	275	32	5	C	21	no
6 TB 170	3210334172	6	170	185	242	170	275	32	4	C	21	no
6 TB 220	3210334220	6	220	226	308	170	275	41	3	C	14	no
6 TB 220	3210334221	6	220	226	308	170	275	41	5	C	14	no
6 TB 220	3210334222	6	220	226	308	170	275	41	4	C	14	no

* The last digit varies according to the connection chosen.

In addition to maintenance free batteries, we also supply low-maintenance batteries.
Please request our product information for further details.

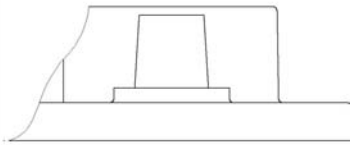
Connection and torque

1. G-M6



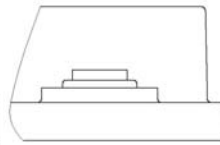
6 Nm

2. A-Terminal



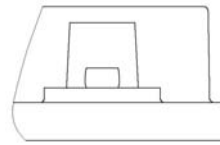
8 Nm

3. F-M8



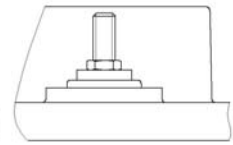
20 Nm

4. Cone



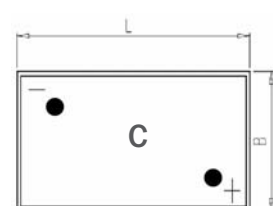
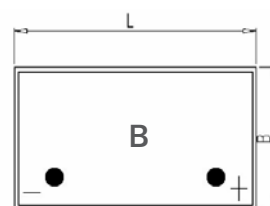
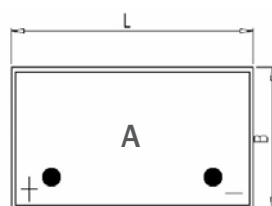
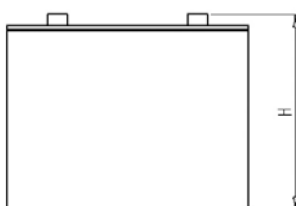
20 Nm

5. M-M6



20 Nm

Terminal layout



trak[®] bloc charging system

Voltage [V]	trak [®] bloc battery	chargers trak [®] bloc charging time ca. 10h
12V	12V (1x)12 TB 50-115	E230G12/15B-F11TBL-B8
12V	12V (1x)12 TB 130-220	E230G12/25B-F11TBL-C8
24V	24V (2x)12 TB 50-70	E230G24/12B-F11TBL-B8
24V	24V (2x)12 TB 80-220	E230G24/25B-F11TBL-C8
36V	36V (3x)12 TB 50-220	E230G36/25B-F11TBL-G
48V	48V (4x)12 TB 50-115	E230G48/18B-F11TBL-G
48V	48V (4x)12 TB 130-220	E230G48/36B-F11TBL-N

All units designed for mains operation at 207V AC - 253 V AC and 50/60 Hz.
Automatic compensation for mains power fluctuations $\pm 10\%$.
Special voltages (110V 1~) on request.

TBL chargers

are suitable for all applications of trak[®] bloc batteries, in particular for industrial applications and for personal use.



■ Features of the trak[®] bloc charger:

- Regulated chargers operating at high frequency
- Precise charging of the battery through micro-processor control
- Optimal assignment of charging currents to battery capacity
- Energy-saving charging (high degree of efficiency)
- Fully-automatic start, charging sequence, and fully-automatic disconnection
- LEDs show the state of charge, charging progress and events
- Diagnostic checks during charging, and automatic switching off in the event of malfunction
- Robust casing with wall mounting option
- Optional immobiliser
- Optional external state of charge display
- Capable to on-board installation

■ Your benefits from trak[®] bloc chargers:

- Special HOPPECKE charging characteristic - 100% matching of charger and battery
- Warranty of long cycling life time
- Guaranteed availability of battery capacity in fast charging
- Low power consumption
- Reliability in operation
- Simplified handling due to automatic start of charging on contacting
- Small, lightweight chargers
- Suitable for the complete range of applications of trak[®] bloc batteries

10 good reasons for HOPPECKE trak[®] bloc

- Made in Germany
- Use of HOPPECKEabsorbent glass mat technology which received the 2000 Innovation Award
- More power at a favourable price
- Comprehensive and well-planned product range
- Our own service network in Germany and throughout Europe
- A high degree of flexibility for tailor-made customer solutions
- Constant availability from stock
- Our own recycling system
- System supplier: in addition to batteries and cells, intelligent charging systems, battery control units and battery management systems are also available
- Production and sale of innovative and high-quality battery systems for traction applications for over 80 years

Recycling

We offer our customers our own battery return system. All lead-acid batteries are taken to the secondary lead smelting plant at our HOPPECKE site, observing the provisions of the German

- recycling and waste law
- battery regulations
- transport approval regulations
- together with the general principles of environmental protection and our own corporate guidelines.

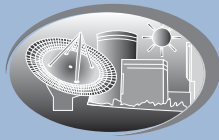
The HOPPECKE smelting plant is the only lead smelter certified in the whole of Europe under:

- DIN EN ISO 9001 (processes and procedures)
- DIN EN ISO 14001 (environmental audit)
- Specialist disposal regulations covering specialist disposal with all the associated waste codes for storage, treatment and recycling.

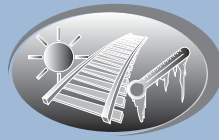




Motive Power Systems



Reserve Power Systems



Special Power Systems



Service



HOPPECKE Batteries – European Sales and Service Network

Products and services – the complete solution ...

- Low-maintenance and no-maintenance batteries
- Innovative battery chargers based on the latest technology
- Battery accessories
- Battery management systems and software
- Battery changeover systems
- Battery / charger servicing
- Battery recycling
- Applications engineering and technology
- Battery room design
- Technical training and seminars
- Leasing
- Power by the hour

... all under a single name

For further information: www.hoppecke.com