



# Data sheet

## trak | uplift battery series

### 01 battery system

Technology	Lead batteries (vented with liquid electrolyte)
Application	Traction batteries (e.g. for industrial forklift trucks)
Technical design	Single cells in a tray connected in series
Connection system	Fully insulated flexible cable connector system, screw dimension M10
Nominal voltage	12 – 120V (other voltages available on request)
Dimensions, weight, design	According to DIN 43536, DIN 43531, DIN 43535, DIN 43537 (Other dimensions available on request)
	- trak   air electrolyte circulation system
	- Vent plug
	- Central degassing system
	<ul> <li>trak   aquafill water refilling system</li> </ul>
Options	<ul> <li>trak   aquafill with central degassing system</li> </ul>
	- Electrolyte level indicator
	- Temperature sensors pt100 / pt1000
	<ul> <li>trak   collect monitoring system</li> </ul>
	- Tray cover
Ability for opportunity charging	with trak   air option
Ability for fast charging	with trak   air option
Ability for use in deep-freeze	with special trak   air und trak   aquafill components
areas	
Recuperation	yes

#### 02 cell

Technology	Single cells with tubular electrodes
Dimensions, marking	Dimension series L (PzS) and E (PzB) according to DIN EN 60254-2
Capacity C <sub>5</sub> (U <sub>f</sub> = 1.70 V/C, T = 30°C)	64 – 1550Ah
Depth of discharge (max.)	80% C <sub>5</sub>
Energy efficiency <sub>nWh</sub> according to DIN EN 16796-1	up to 77.5% (charging factor 1.05)
Service life	Up to 1.950 cycles* * verified by accelerated laboratory test
Operating temperature range	-20 to +55°C
Protection class	IP 25, according to DIN 40050
Recharging interval during storage	every 1.5 months (storage at 20°C)
Ventilation requirements	according to IEC 62485-3 and ZVEI-Information leaflet No. 14e "Ventilation of battery charging rooms for lead-acid traction batteries"
Nominal density of the electrolyte	1.29 kg/l
Cell container	100% recycled polypropylene, flam mability class UL 94 HB
Positive electrode	Tubular plate with non-woven polyester-gauntlet
Negative electrode	Flat plate
Separator	High Charge polyethylene-separator with optimized profile structure and antimony-blocker
Pole design	HOPPECKE Compound Pole with plastic overmolded three-dimensional metal surface





Recommended charging
procedure
Charging voltage (main charging phase)
Charging current

#### 03 special features



IU, IUIa according to DIN 41773 T1

2.40 V

up to  $2 \times I_5$  (higher currents possible)

from trak | uplift to trak | uplift air

The use of additives specially matched to optimized active masses improve the high-current capability during charging and discharging (rapid charging/recuperation)

Full covering of the electrode by a separator pocket, protects against short circuits and extends the service life Battery cells are trak | air ready - giving the possibility to upgrade

 trak | uplift iQ

 with trak | collect battery monitoring system)



HOPPECKE compound pole (sealing and insulating pole/connector system)