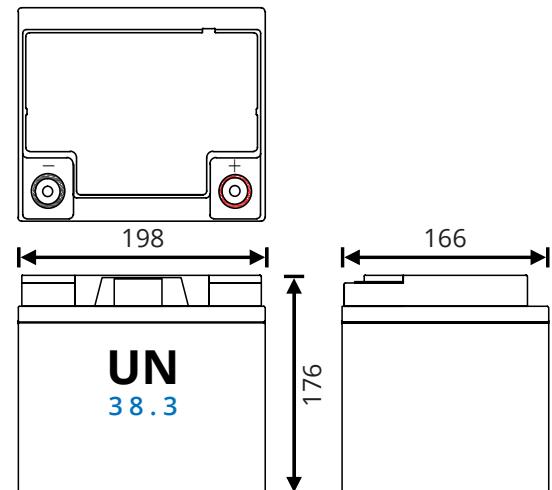
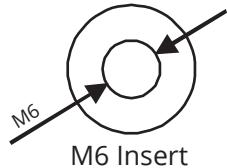


LF 40-12 - LiFePO4 Lithium Series

Lithium Battery



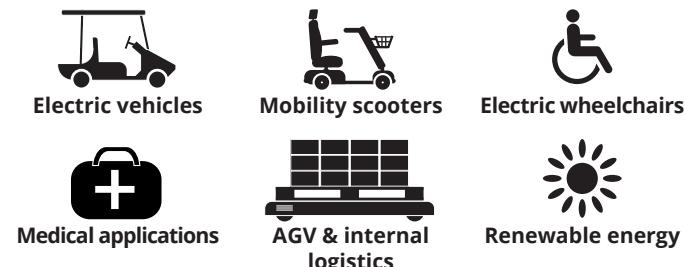
Technical Specifications

Nominal voltage	12.8V
Nominal capacity (25°C)	1Hr: 40.0Ah
Energy	512Wh
Internal resistance	≤40mΩ (@50% SOC)
Maximum charge current	40A
Continuous discharge current	40A
Maximum discharge current	100A (max. 3 sec)
Number of cycles	6500 (50% D.O.D.)
Charge Voltage	14.6V
Charge temperature range	0°C ~ 45°C
Discharge temperature range	-20°C ~ 55°C
Standard terminal	Insert M6 (10Nm torque)
Housing material	ABS (UL94-HB)
Dimensions Length	198 mm
Dimensions Width	166 mm
Dimensions Height	176 mm
Approximate Weight	5.60 kg

BMS Specifications

Charge cut-off Voltage	15.6V (3.9V/Cell)
Reconnect Voltage	14.4V (3.6V/Cell)
Balancing Voltage	14.4V (3.6V/Cell)
Discharge cut-off Voltage	10.0V (2.5V/Cell)
Reconnect Voltage	11.2V (2.8V/Cell)
Short circuit protection	250 ~ 500 µs
Discharge cut-off Current	150A (±5A; 31ms)
Temperature cut-off	65°C
Reconnect temperature	55°C

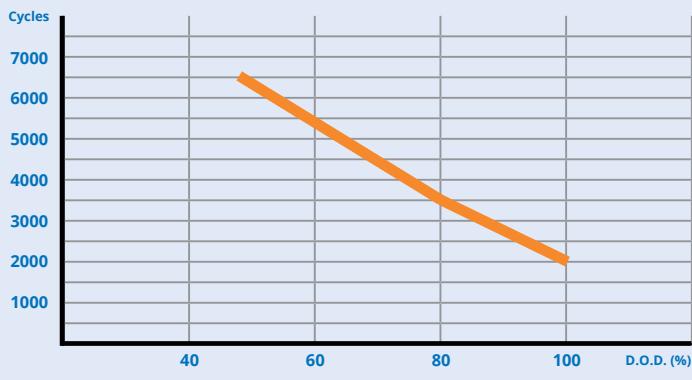
Typical applications



Features

- Battery UN38.3 and CE certified
- Cells UL1642 & IEC62133 certified
- UN3480, Class 9 shipping classification
- BMS protection
- ABS UL94-HB Housing (V0 available on request)
- Internal cell balancing
- Maintenance free
- Low self discharge
- Can be used or stored in any position
- Lightweight
- Suitable for interim charging
- Parallel connection only

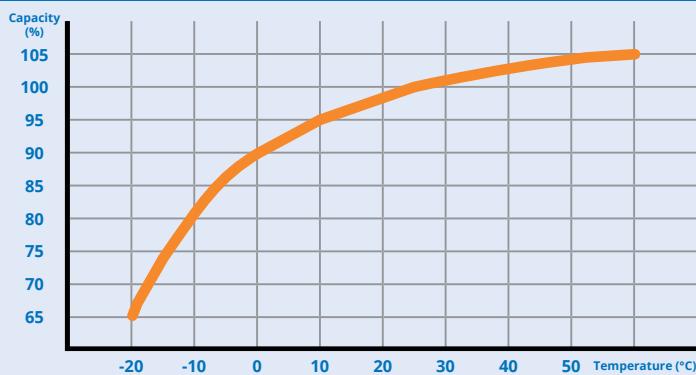
Service life vs Depth of Discharge



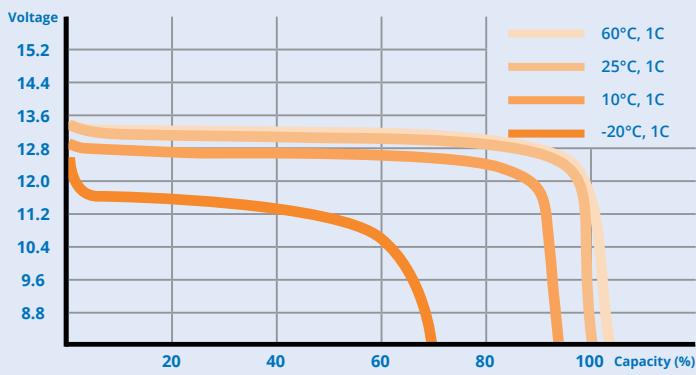
LF 40-12 - LiFePO4 Lithium Series

Lithium Battery

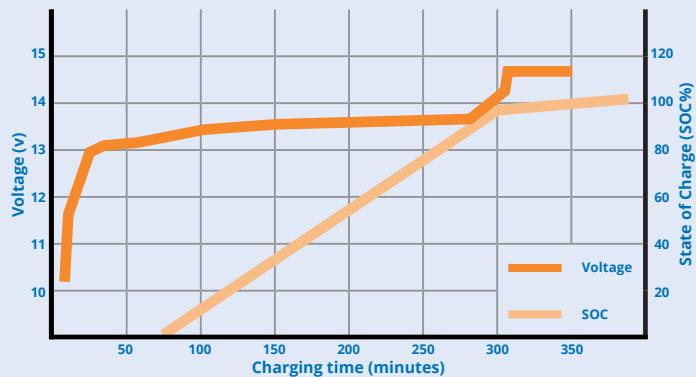
Temperature effects on capacity



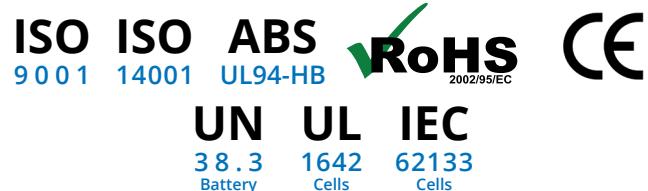
Discharge characteristics



Battery charge characteristics (0.2C Charge)



Certifications and Standards



Lithium LiFePO4 Series

The pbq Lithium Ferro Phosphate battery is a product with great performance. It is even more. It is a total concept, serving all the parties downstream; from the very first production step, to the user, to transportation and even to the recycler. The pbq LiFePO4 concept embraces a long service life, optimal energy density in both volume as well as in weight and a high grade of safety. The battery contains everything you need in a closed blue casing. Just connect it to your application.

LiFePO4 batteries are ideal for deep cycle applications such as; electric scooters and vehicles, steps, golf carts, energy storage and tools. High power pbq LiFePO4 batteries has light weight and optimized size. Light weight means energy would be saved due to total weight reduced, and weight reduced also means long driving distance. Optimized size batteries are suitable to replace lead acid batteries. LiFePO4 batteries enlarges your range of your applications!

LiFePO4 Service Life

The pbq LiFePO4 battery has a service life of more than 2000 cycles at 100% depth of discharge and a remaining capacity of 80%! This long lasting cyclic use offers an uninterrupted use of the application. It also reduces service costs, downtime of the equipment and replacements of the battery. Just calculate what this will save over time and see that it is worth to invest in.