

BASIC INFORMATION

Lithium batteries provide excellent performance, capacity and reliability. Using cutting-edge lithium cell technology, the lithium series is designed for environmentally sensitive areas that require increased cycle life in commercial, industrial and residential applications. Maintenance-free and advanced design features make the Lithium Series the ultimate choice for a wide variety of industries. The batteries are CE certified.

The self-heating function in LiFePO4 batteries is a built-in system designed to warm the battery cells when temperatures drop below a certain point, usually around 0°C (32°F). Cold temperatures can severely impact a battery's ability to charge and discharge efficiently, leading to reduced capacity and potential damage. The self-heating system mitigates these issues by maintaining an optimal operational temperature.

When activated, usually through an internal switch or an external signal, the self-heating system generates heat within the battery using a small amount of its stored energy. This warmth ensures the electrolyte remains fluid, and the chemical reactions necessary for charging and discharging proceed efficiently.

The heating element draws a small amount of power from the battery itself to generate heat. But the power consumption is low enough that it does not significantly impact the overall capacity and performance.

SPECIFICATION

MODEL	TERMINAL	POLARIZATION	Tightening torque screws	Case IP Rating	DIMENSIONS				WEIGHT
					LENGTH	WEIGHT	HEIGHT	WITH TERMINAL	
LFP12100h	M8	LEFT +	12,40 NM	IP65	330mm	172mm	200mm	215mm	13,00kg

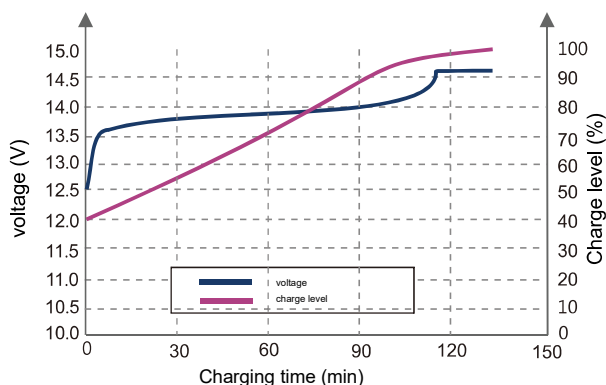
ELECTRICAL SPECIFICATIONS

CAPACITY RATED	DISCHARGE VOLTAGE		INTERNAL RESISTANCE	CHARGING VOLTAGE DURING CYCLICAL WORK	CHARGING CURRENT	
25°C	RECOMMENDED	MAXIMUM	25°C	25°C	RECOMMENDED	MAXIMUM
100Ah	11.80V	9,60V	<50,00mΩ	14,20V - 14,80V	25,00A	100,00A

STORAGE

PERMISSIBLE AMBIENT TEMPERATURE			SELF-DISCHARGE IN 20°C
STORAGE	CHARGING	DISCHARGE	1 MONTH
-20°C up +45°C	-3°C up +65°C	-23°C up +65°C	<3%

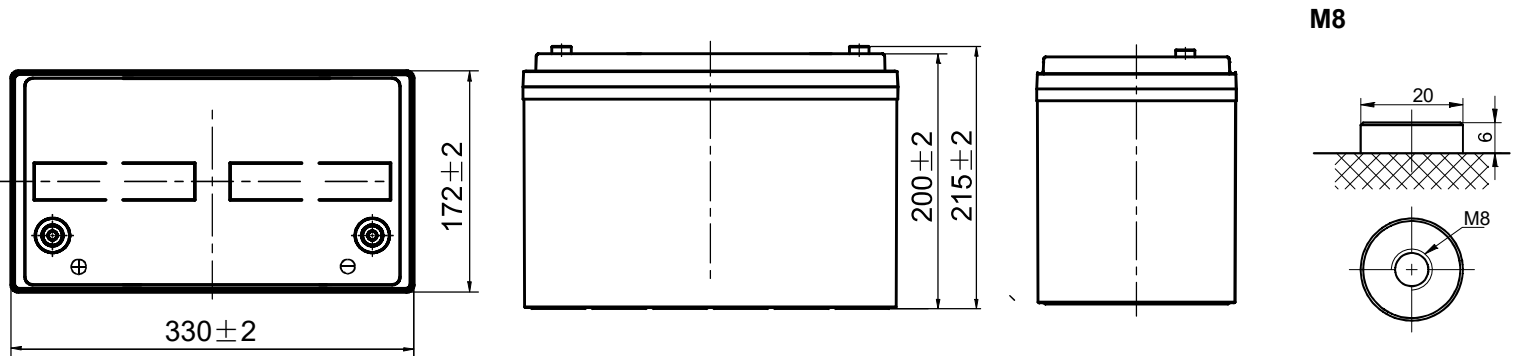
Charge state curve (0,5C, 25°C)



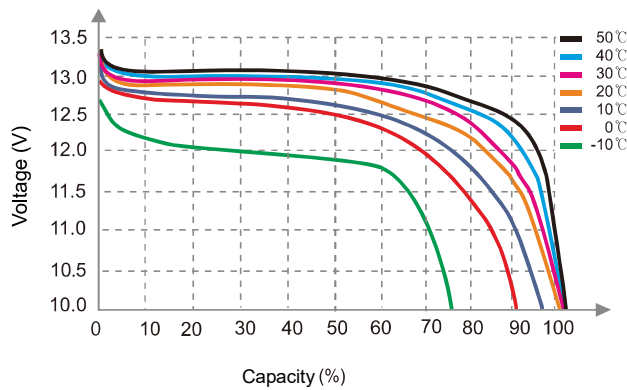
APPLICATIONS

- wheelchair
- scissor lifts
- golf carts
- cleaning machines
- boats
- photovoltaic systems
- mobile devices
- devices powered by an electric motor
- devices with high cycle of work

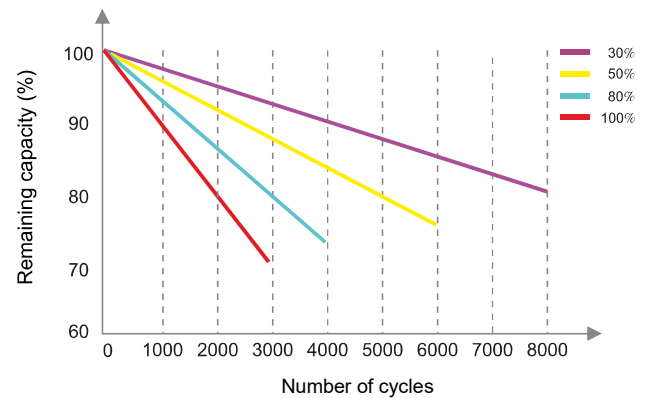
DIMENSIONS



Lowering temperature curve (0.2C)



Discharge cycle life curve DOD 1C 25C



SAFETY



RECYKLING



THE ENVIRONMENT

EXPLOITED BATTERIES ARE CONSIDERED AS HAZARDOUS WASTE. THESE WASTES DUE TO THEIR ORIGIN, CHEMICAL COMPOSITION (THEY CONTAINS HEAVY METALS LIKE LEAD AND OTHER TOXIC SUBSTANCES) AND OTHER FEATURES MAY BE DANGEROUS FOR ENVIRONMENT AND HUMAN OR ANIMAL HEALTH LIFE. ACCORDING TO THE WASTE ACT, WASTE IN THE FORM OF BATTERIES AND ACCUMULATORS SHOULD BE COLLECTED SEPARATELY FROM OTHER TYPES OF WASTE.

IN ORDER TO OBTAIN MORE DETAILED INFORMATION, WE ENCOURAGE YOU TO CONTACT US, WE PROVIDE ANY INFORMATION ON HOW TO HANDLE WITH WASTE BATTERIES AND ACCUMULATORS.