

LITHIUM BATTERIES

LiFePO₄ (LFP)

Batteries for self-contained emergency lighting systems



Product properties lithium iron phosphate batteries

- High-temperature cells 5 to 55 °C
- 18650 cells
- Different cell arrangements
- Charging time 24 h
- > 6 years expected life duration
- 24 months warranty *

LFP batteries benefits

- Safety: LFP chemistries provide thermal and chemical stability, i.e. a thermal runaway in the case of abuse (short-circuited, over-heating, etc.) is deemed highly unlikely.
- High degree of mechanical safety due to the use of metallic cylindrical cell housing (similar to NiCd). In addition, the electrodes do not contain any free-floating oxygen atoms that may heavily react when exposed to air.
- Due to the above, the batteries pass the nail penetration test according to UL 1642.
- High cycle resistance: 75 % remaining capacity after 6 years at max. 55 °C (one discharge per month).
- Low amount of self-discharge: approx. 5 % per month compared to approx. 30 % with NiCd and approx. 35 % with NiMH.
- Less environmental impact due to the abolition of heavy metals such as cobalt.
- Requires more than 50 % less space due to smaller cells compared to NiCd and NiMH.
- Considerably lower purchase cost compared to NiMH batteries.

Size comparison (single cells)

battery type	cell type	dimensions	cell voltage	capacity	volume	energy per volume comparison
NiCd	D	32 x 60 mm	1.2V	4.5 Ah	43'400 mm ³	100%
NiMH	LA	18 x 70 mm	1.2V	4.5 Ah	17'800 mm ³	41%
LFP	18650	18 x 65 mm	3.2V	1.5 Ah	16'540 mm ³	43%

Certification marks

- CE
- UN38.3



Certifications

- EN 62620 (Performance)
- EN 62133 (Safety)

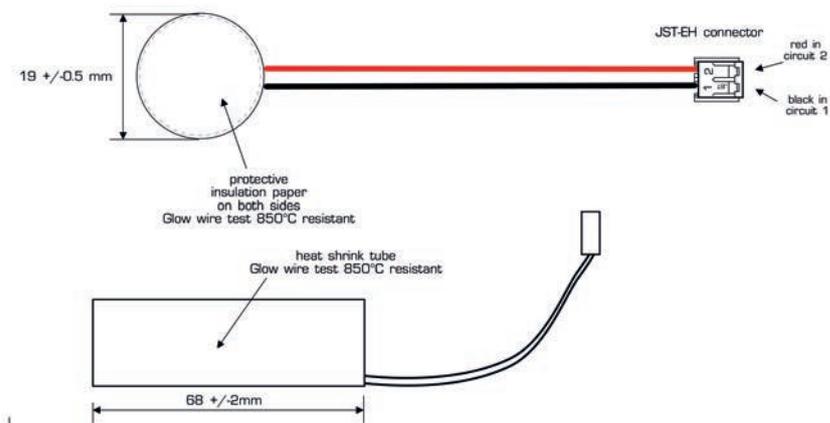
* Only for LFP batteries used with self-test devices with battery regeneration and at least four discharges per year. Only 12 months warranty when combined with standard or self-test devices that perform less discharges.

Technical data LFP batteries

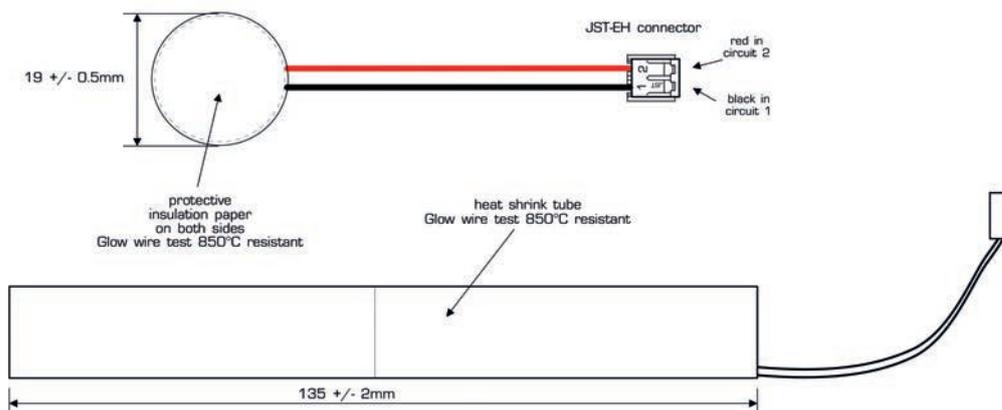
	1 cell	2 cells stick	2 cells block	3 cells stick	3 cells block
Cell voltage	3,2 V	3,2 V	3,2 V	3,2 V	3,2 V
Capacity	1,5 Ah	3,0 Ah	3,0 Ah	4,5 Ah	4,5 Ah
Height	19 mm	19 mm	19 mm	19 mm	19 mm
Width	19 mm	19 mm	37 mm	19 mm	55 mm
Length	68 mm	135 mm	68 mm	200 mm	68 mm
Weight	45 g	90 g	90 g	130 g	130 g
Item no.	33'275'811	33'275'802	33'275'810	33'275'809	33'275'813
Sales unit	98 pieces	60 pieces	60 pieces	40 pieces	36 pieces

Dimensional drawings

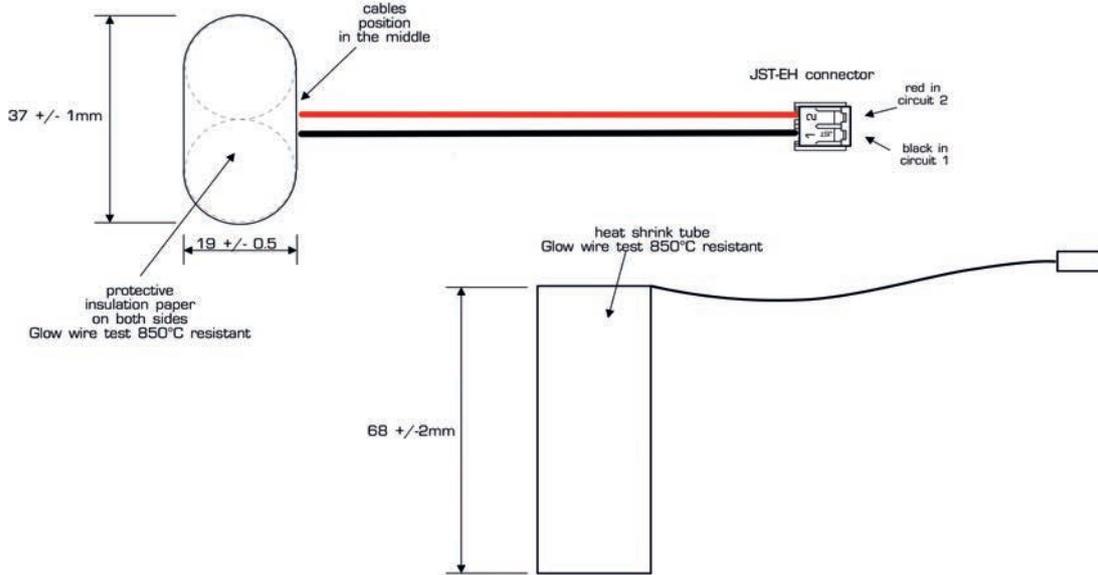
1 cell LFP (item no. 33'275'811)



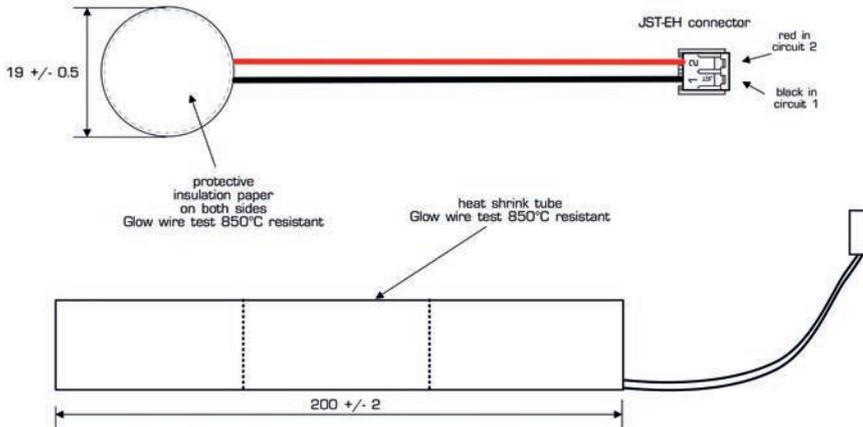
2 cells LFP stick (item no. 33'275'802)



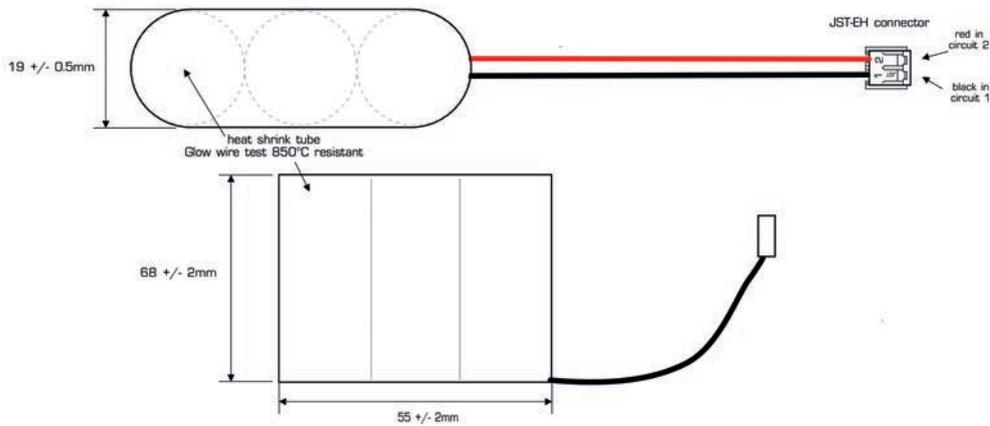
2 cells LFP block (item no. 33'275'810)



3 cells LFP stick (item no. 33'275'809)



3 cells LFP block (item no. 33'275'813)



All information is supplied without liability. Technical data subject to change without notice.