

ALKALINE ZINC-MANGANESE DIOXIDE

MERCURY-FREE BUTTON CELL

碱性锌-二氧化锰无汞扣式电池

LR44 0.% Hg

(Made In China - EXP.)



PRODUCT SPECIFICATION

产品规格书

Doc no. : NL-TS- LR44%Hg

Rev B3

DATE 2023 NOV

NEW LEADER BATTERY LTD.

新利達電池有限公司

Add.: Flat A, 4/F., Block 1, Camelpaint Building, 62 Hoi Yuen Road, Kwun Tong, Kowloon, Hong Kong.
地址：香港九龍官塘開源道 62 號駱駝漆大廈第一期四樓 A 座

Tel 電話：(+852) 2790 6280

Fax 傳真：(+852) 2763 4104

E-mail 電郵：newleader@newleader.com.hk

Website 網址：www.newleader.com.hk

The manufacturer reserves the right to modify product specification herein without prior notice.
本公司對本產品技術規格如有更改，恕不另行通知。

1 Scope 适用范围

This specification is applicable to New Leader' s alkaline zinc-manganese dioxide mercury-free button cell : 0.%Hg LR44 (Made in China-Exp.)

本规格书适用于新利达的碱性锌-二氧化锰无汞扣式电池: LR44 0.%Hg (China-Exp).

2 Designations 型号

NEW LEADER 新利达	IEC 国际电工委员会	ANSI 美国国家标准学会	JIS 日本工业标准	OTHERS 其他
LR44 0.%Hg China-Exp	LR44	1166A	A13	LR1154, AG13, A76, 157, 357

3 Normative references 引用标准

(IEC 60086-1:2021, MOD) GB/T 8897.1—2021 原电池 第 1 部分: 总则

(IEC 60086-2:2021, MOD) GB/T 8897.2—2021 原电池 第 2 部分: 外形尺寸和电性能要求

(IEC 60086-3:2021, MOD) GB/T 8897.3—2021 原电池 第 3 部分: 手表电池

(IEC 60086-5:2021, IDT) GB 8897.5—2021 原电池 第 5 部分: 水溶液电解质电池的安全要求

4 Chemical system 化学体系

Zinc-Manganese dioxide (Potassium hydroxide electrolyte)

锌-二氧化锰 (氢氧化钾电解质)

5 Nominal voltage 标称电压

1.5 V

6 Average weight 平均重量

2.0 g

7 Average capacity 平均容量

≥ 160mAh

Conditions: Rated at 6.8KΩ at (20±2)°C, continuous discharging to the End-point Voltage of 0.9V.

条件: 在(20±2)°C环境下, 使用 6.8KΩ 电阻连续放电, 终止电压为 0.9V。

8 Electrical characteristics 电性能 (Test conditions 检测条件: 20°C±2°C)

Items 项目	Off-load voltage 空载电压	On-load voltage 负载电压 (Load 负载: 6.8KΩ)	Acceptance criteria 接收准则
Initial 初始期 (Within 30 days after delivery) (交货后 30 天内)	1.53V ~ 1.65V	1.52V ~ 1.65V	MIL-STD-105E, Class II, Double sampling, AQL=0.4
After 12 months 12 个月后	1.52V ~ 1.62V	1.51V ~ 1.62V	

9 Discharge performance 放电性能

Discharge conditions 放电条件					Minimum average duration 最小平均放电时间	
Temperature 温度	Relative Humidity 相对湿度	Resistance 电阻	Daily period 每天放电时间	End-point voltage 终止电压	Initial 初始期	After 12 months 12 个月后
(20±2)°C	(55±20)%	6.8 KΩ	24 h	0.9 V	860 h	774 h

10. Safety characteristics 安全性能

Test Item	Conditions	Period	Requirements	Acceptance
External Dead short 直接短路	Temp 20 ± 5 ° C 溫度: 20 ± 5 ° C	24 hours	There shall be no explosion during the test 沒有爆炸	N=9 Ac=0 Re=1

11 Marking 标志

The following markings will be stamped on the cathode can of the battery:

在电池的正极壳上标明以下内容:

(1) Designation 型号: LR44 0.% Hg

(2) Polarity marking 极性标记: '+'

(3) Manufacturer trademark 制造商商标:



(4) Mercury-free marking 无汞标志: 0.% Hg CELL – China Exp.mm/yy

12 Storage requirements 贮存要求

Batteries shall be stored in well-ventilated, dry and cool conditions. For normal storage, the temperature should be between 10°C and 25°C and should never exceed 30°C, the relative humidity should be at (55±20)%. High temperature or high humidity may cause deterioration of the battery performance or surface corrosion.

电池应贮存在通风良好、阴凉干燥处。正常的贮存温度应在 10°C ~ 25°C，不应当超过 30°C，相对湿度应在(55±20)%。高温或高湿可能会损害电池性能或造成电池表面腐蚀。

13 Safety precautions during handling of batteries 使用电池安全注意事项

(1) Always insert batteries correctly with regard to the polarities (+ and -) marked on the battery and the equipment. Batteries which are incorrectly placed into equipment may be short-circuited, or charged. This can result in a rapid temperature rise causing leakage, explosion and may cause personal injury.

应按电池和电器具上标明的极性标志（+ 和 -）正确地装入电池。不正确装入电器具的电池有可能被短路或充电，使电池温度迅速升高，导致漏液、爆炸和人身伤害。

(2) Batteries should not be short-circuited, heated and thrown into fire.

不要将电池短路、加热及投入火中。

(3) Do not charge batteries. Attempting to charge a non-rechargeable battery may cause internal gas and/or heat generation resulting in leakage, explosion and may cause personal injury.

不要对电池进行充电。试图对不可充电的电池充电会使电池内部产生气体和/或热量，导致电池漏液、爆炸和人身伤害。

(4) Do not mix old and new batteries or batteries of different types or brands. When replacing batteries, replace all of them at the same time with new batteries of the same brand and type. When batteries of different brand or type are used together, or new and old batteries are used together, some batteries may be over-discharged due to a difference of voltage or capacity. This can result in leakage, explosion and may cause personal injury.

不要将新旧、不同型号或品牌的电池混用。更换电池时，要用同一品牌、同一型号的新电池同时更换全部电池。不同品牌或不同型号的电池或新旧电池混用时，由于存在电压或容量的差异，可能会使某些电池过放电，从而导致电池漏液、爆炸和人身伤害。

(5) Exhausted batteries should be immediately removed from equipment and properly disposed of. When discharged batteries are kept in the equipment for a long time, electrolyte leakage may occur causing damage to the appliance and/or personal injury.

应立即从电器具中取出已耗尽电能的电池并妥善处理。放过电的电池长时间留在电器具中有可能发生电解液泄漏，导致电器具损坏和/或人身伤害。

(6) Do not weld or solder directly to batteries. The heat from welding or soldering directly to

a battery may cause internal short-circuiting resulting in leakage, explosion and may cause personal injury.

不要直接焊接电池。当直接焊接电池时，电池有可能因受热而损坏，导致内部短路并引起漏液和爆炸，可能导致人身伤害。

(7) Do not dismantle batteries. When a battery is dismantled or taken apart, contact with the components can be harmful and may cause personal injury.

不要拆解电池。拆解电池，接触电池内部的部件是有害的，可能导致人身伤害。

(8) Store unused batteries in their original packaging away from metal objects. If already unpacked, do not mix or jumble batteries to avoid them short-circuiting with each other. 将不用的电池放在原包装内，远离易引起短路的金属物体。如果包装已经拆掉，不要把电池混堆在一起，以免电池相互短路。

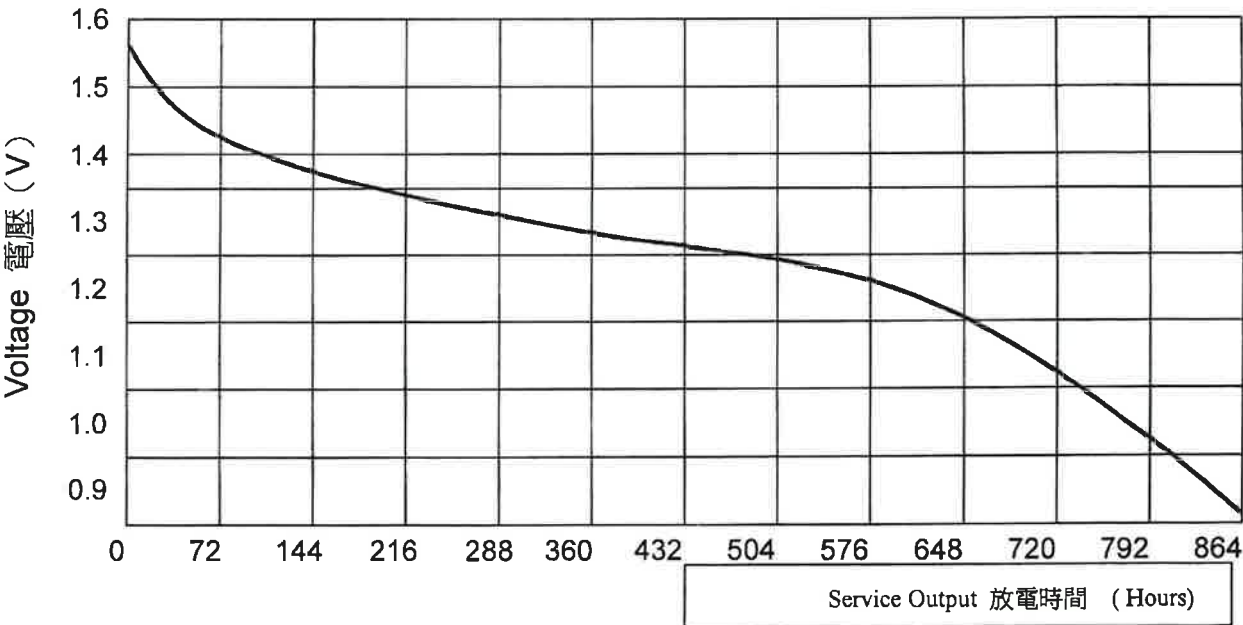
(9) Keep batteries out of the reach of children to prevent swallow. In case of ingestion of a cell or a battery, the person involved should seek medical assistance promptly. 电池应存放在儿童拿不到的地方，以免儿童误吞电池。万一误吞电池应马上就医。

14 Storage Life 儲存期

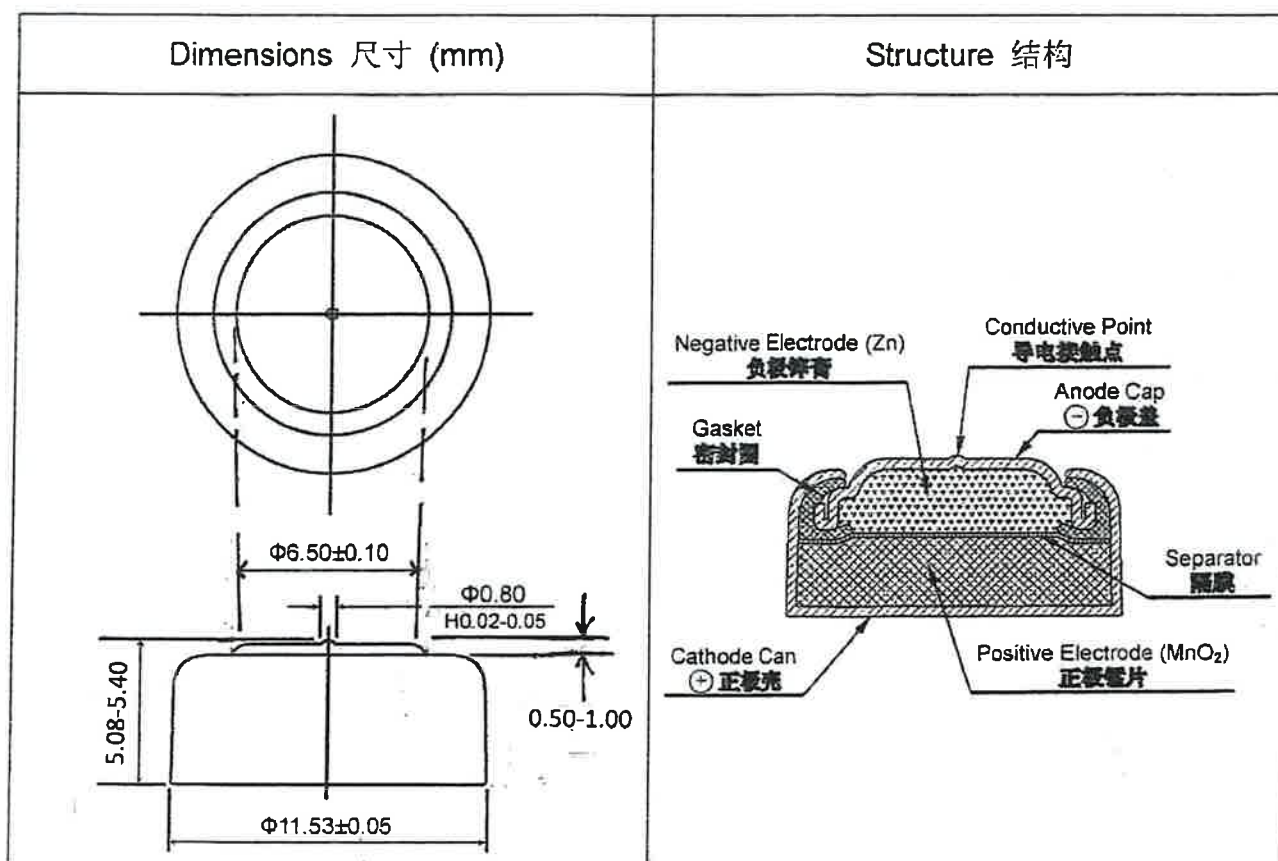
18 Months / 18 个月

15 Discharge curve 放电曲线

Typical load 放电负载	Discharge schedule 放电方法	End-point voltage 终止电压	Environmental conditions 环境条件
6.8 KΩ	Continuous 连续	0.9V	Temp. 温度: (20±2)°C RH 相对湿度: (55±20)%



16 Battery dimensions & structure 電池尺寸及結構



負極蓋面比電池肩高位高出 0.5 – 1.0 MM

Difference between total height and shoulder height should be 0.50 – 1.0 MM

17 Packing condition 包裝數據

每箱 4 札 X 25 盤 X 100 粒/盤, 共 10,000 粒 /箱., 毛重: 22Kg, 淨重, 20Kgs 尺寸: .29.5X20X30.5 cm

4 bundles X 25 trays X 100 Pcs /tray = 10,000 pcs/carton, Gr.wt.22Kg, N.W 20Kgs
Meas.29.5X20X30.5 cm