Primary lithium battery
LSH 14 “light”

3.6 V Primary lithium-thionyl chloride (Li-$SOCl_2$)
High power
C-size spiral cell
(non-restricted for transport)

Benefits

- High voltage response, stable during most of the lifetime of the application
- High drain/pulse capability
- Wide operating temperature range *(-60°C/85°C)*
- Easy integration in compact system
- Low self-discharge rate *(less than 3% after 1 year of storage at +20°C)*
- Non-restricted for transport

Key features

- Stainless steel container
- Hermetic glass-to-metal sealing
- Built-in safety vent
- Finish with 5 A fuse
- Non-flammable electrolyte

Main applications

- Radiocommunication and other military applications
- Alarms and security systems
- Beacons and emergency location transmitters
- GPS
- Metering systems
- Sonobuoys

Cell size references	**UM2 – R14 – C**

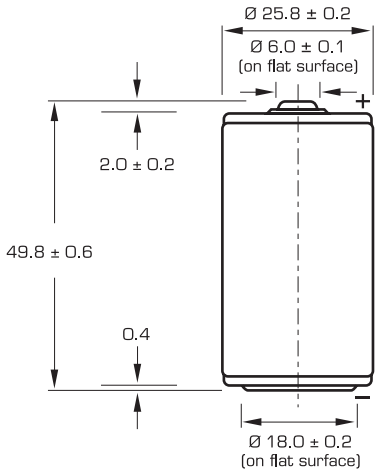
Electrical characteristics

(typical values relative to cells stored for one year or less at +30°C max.)		
Nominal capacity *(at 15 mA + 20°C 2.0 V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off)*		3.6 Ah
Open circuit voltage	(at +20°C)	3.67 V
Nominal voltage	(at 1mA +20°C)	3.6 V
Pulse capability: Typically up to 2000 mA *(2000 mA/0.1 second pulses, drained every 2 mn at + 20°C from undischarged cells with 10 µA base current, yield voltage readings above 3.0 V. The readings may vary according to the pulse characteristics, the temperature, and the cell's previous history. Fitting the cell with a capacitor may be recommended in severe conditions. Consult Saft)*		
Maximum recommended continuous current *(to maintain cell heating within safe limits. Battery packs may imply lower level of maximum current and may request specific thermal protection. Consult Saft)*		1300 mA
Storage	*(recommended)* *(for more severe conditions, consult Saft)*	+ 30°C (+ 86°F) max
Operating temperature range *(Operation at extreme T may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult Saft)*		- 60°C/+ 85°C (- 76°F/+185°F)

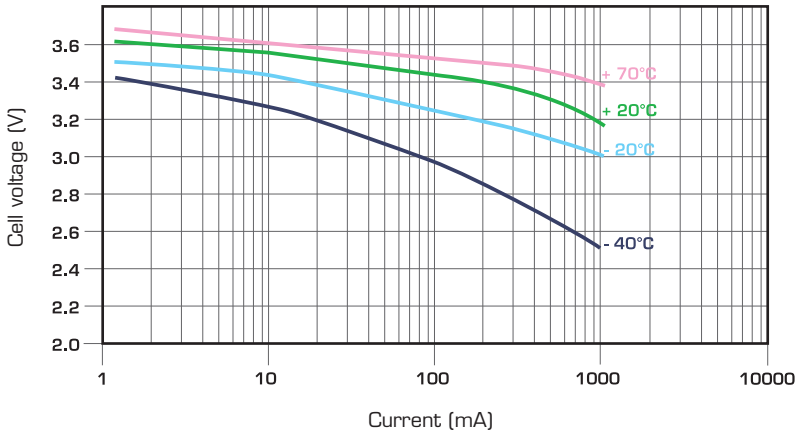
Physical characteristics

Diameter *(max)*		26.0 mm (1.02 in)
Height *(max)*		50.4 mm (1.98 in)
Typical weight		51 g (1.8 oz)
Li metal content		below 1 g
Available termination suffix		
	CN, CNR	radial tabs
	3 PF, 3 PF RP	radial pins
	CNA (AX)	axial leads
	FL	flying leads …etc.

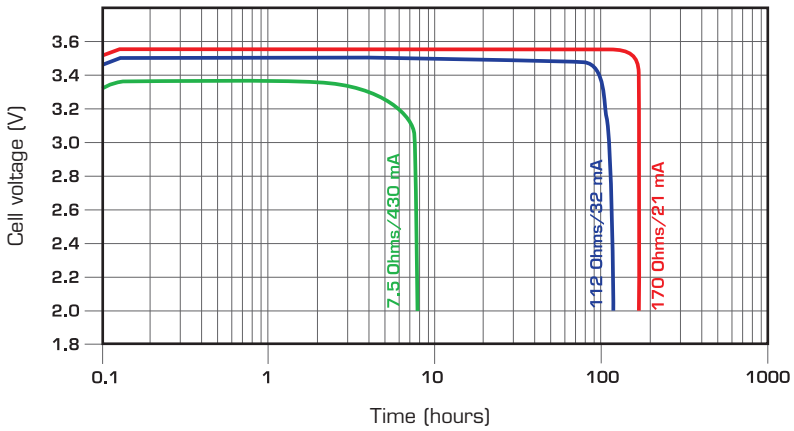
LSH 14 “light”



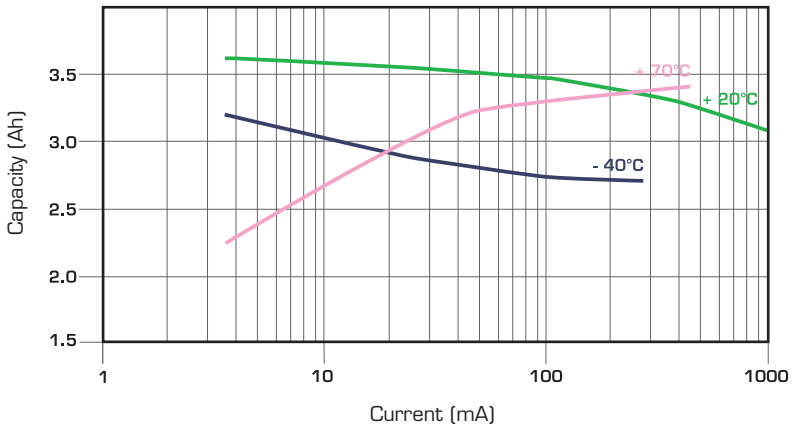
Dimensions in mm.



Voltage plateau versus Current and Temperature (at mid-discharge)



Typical discharge profiles at +20°C



Restored Capacity versus Current and Temperature (2.0 V cut off)

Storage

- The storage area should be clean, cool (preferably not exceeding + 30°C), dry and ventilated.

Warning

- Fire, explosion and burn hazard.
- Do not recharge, short circuit, crush, disassemble, heat above 100°C (212°F), incinerate, or expose contents to water.
- Do not solder directly to the cell (use tabbed cell versions instead).

Saft
Specialty Battery Group
12, rue Sadi Carnot
93170 Bagnolet - France
Tel +33 (0)1 49 93 19 18
Fax +33 (0)1 49 93 19 69

www.saftbatteries.com

Doc. N° 31046-2-1006

For more details on primary lithium technologies please refer to Primary Lithium Batteries Selector Guide Doc N° 31048-2.

Published by the Communications Department.

Photo credit: Saft

Société anonyme au capital de 31 944 000 €
RCS Bobigny B 383 703 873

Produced by Arthur Associates