

Primary lithium batteries

LSH 26180

3.6V Primary lithium-thionyl chloride (Li-SOCl₂)

High power

1/3 C-size spiral cell

For high drain/high pulse applications requesting superior voltage response and operating life in -60°C/+85°C environments.



Key features

- High and stable operating voltage
- Superior drain capability
- Low self-discharge rate
(less than 3% after 1 year of storage at +20°C)
- Stainless steel container
- Hermetic glass-to-metal sealing
- Built-in safety vent
- Finish with 5 A fuse
- Non-flammable electrolyte
- Non-restricted for transport

Main applications

- Radiocommunication and other military applications
 - Night vision
 - Beacons and emergency location transmitters
 - Tracking systems
- etc...

NATO stock number
(PS 31 A finish)
6135 14 376 4875

Cell size references

1/3 UM2 - 1/3 R14 - 1/3 C

Electrical characteristics

(typical values relative to cells stored for one year or less at +30°C max.)

Nominal capacity (at 10 mA +20°C 2.0V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off).	1.2 Ah
Open circuit voltage (at +20°C)	3.67V
Nominal voltage (at 0.5 mA +20°C)	3.6V

Pulse capability: Typically up to 700 mA (700 mA/0.1 second pulses, drained every 2 mn at +20°C from undischarged cells with 10 µA base current, yield voltage readings above 3.0V. 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)

Continuous current permitting 50% of the nominal capacity to be achieved at +20°C with 2.0V cut off. (Higher currents possible, consult Saft)	400 mA
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Storage (recommended) (for more severe conditions, consult Saft)	+30°C (+86°F) max
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Operating temperature range (Operation above ambient 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)
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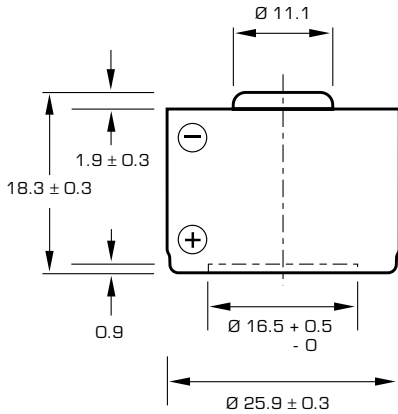
Physical characteristics

Diameter (max)	26.2 mm (1.03 in)
Height (max)	18.6 mm (0.73 in)
Typical weight	24 g (0.9 oz)
Li metal content	approx 0.3 g

Available termination suffix

CN, CNR	radial tabs
3 PF, 3 PF RP	radial pins
CNA (AX)	axial leads
FL	flying leads ...etc.

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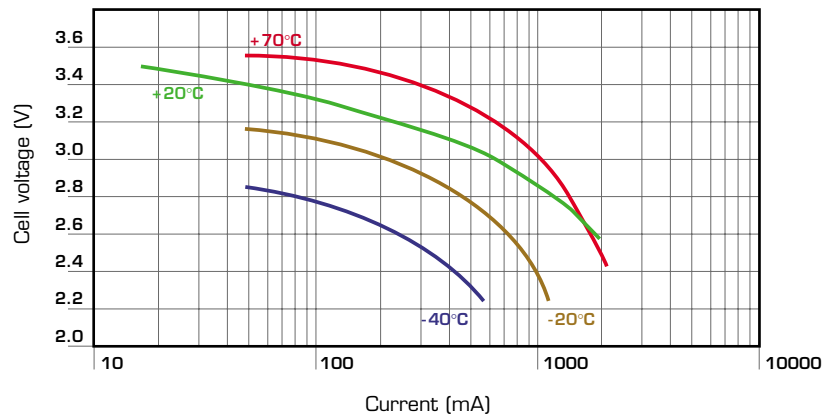
Dimensions in mm.

Storage

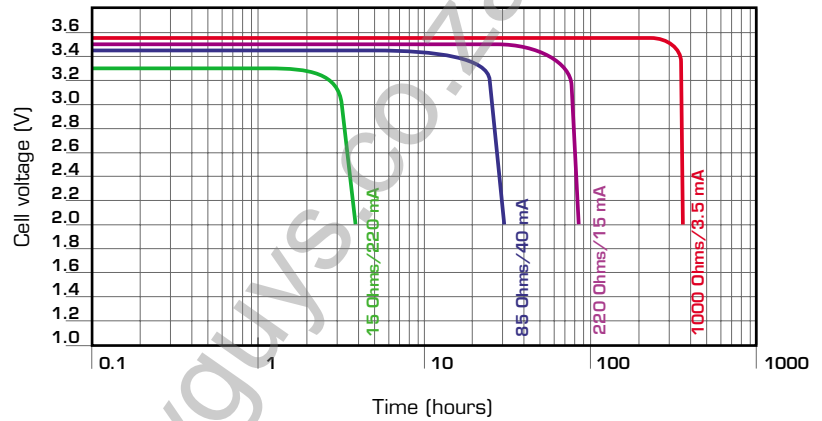
- The storage area should be clean, cool (not exceeding +30°C), dry and ventilated.

Warning

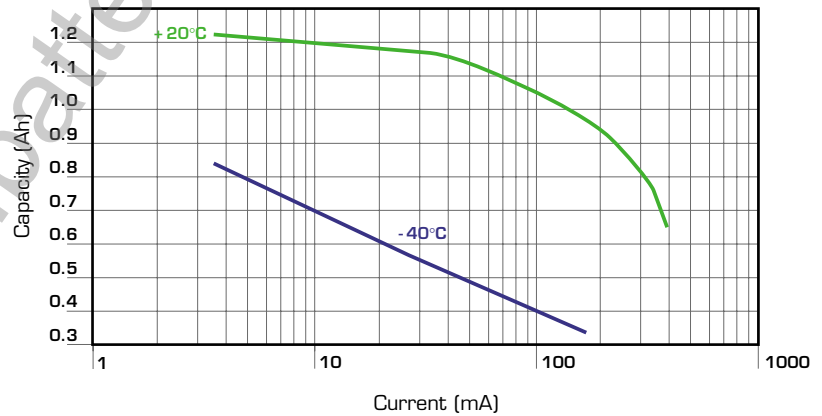
- Fire, explosion and severe burn hazard.
- Do not recharge, short circuit, crush, disassemble, heat above 100°C (212°F), incinerate, or expose contents to water.
- Do not solder directly to the cell.



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)