

Primary lithium batteries

LO 30 SHX

3.0 V Primary lithium-sulfur dioxide (Li-SO₂)
 Very high drain and pulse capability
 "Thin" D-size spiral cell



Benefits

- High and stable discharge voltage
- Superior pulse capability
- Performance not affected by cell orientation
- Long storage possible before use
- Ability to withstand extreme temperature

Key features

- Low self-discharge rate
(less than 3% after 1 year of storage at +20°C)
- Hermetic glass-to-metal sealing
- Built-in safety vent
(at the negative end of the cell)
- Restricted for transport *(class 9)*
- UL Component Recognition
(File Number MH 15076)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in the USA

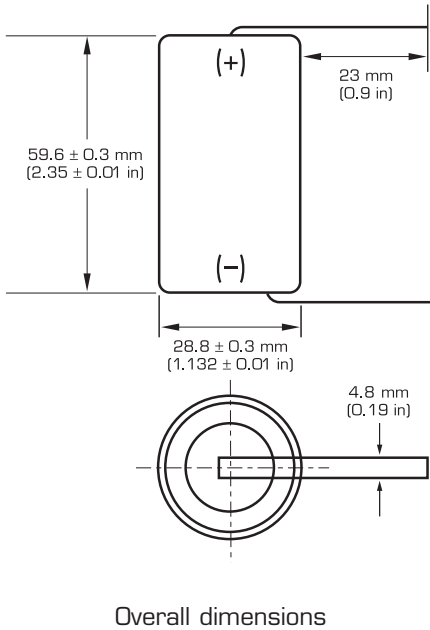
Main applications

- Radiocommunications and other military applications
- Beacons and Emergency Location Transmitters
- Sonobuoys

Cell size reference		"Thin" D
Electrical characteristics		
<i>(typical values for cells stored for one year or less)</i>		
Nominal capacity <i>(at 0.2 A +20°C 2.0 V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off)</i>		5.75 Ah
Open circuit voltage (at +20°C)		3.0 V
Nominal voltage (at 0.6 A +21°C/+70°F)		2.8 V
Maximum recommended continuous current <i>(to avoid over-heating. Higher currents possible, consult Saft)</i>		3 A
Pulse capability : Typically up to 10 A <i>(The voltage 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)</i>		
Storage <i>(recommended possible without leakage)</i>		+30°C (+86°F) max -60°C/+85°C (-76°F/+185°F)
Operating temperature range <i>(Short excursions up to +85°C possible at currents below 1 A)</i>		-60°C/+70°C (-76°F/+158°F)
Physical characteristics		
Diameter <i>(max)</i>		29.1 mm (1.14 in)
Height <i>(max; finish with radial tabs)</i>		59.9 mm (2.36 in)
Typical weight		63 g (2.21 oz)
Li metal content		1.9 g
Standard cell comes with resin potting in the topshell area and two radial 0.15 mm - thick nickel tabs		
Different configurations available on request.		

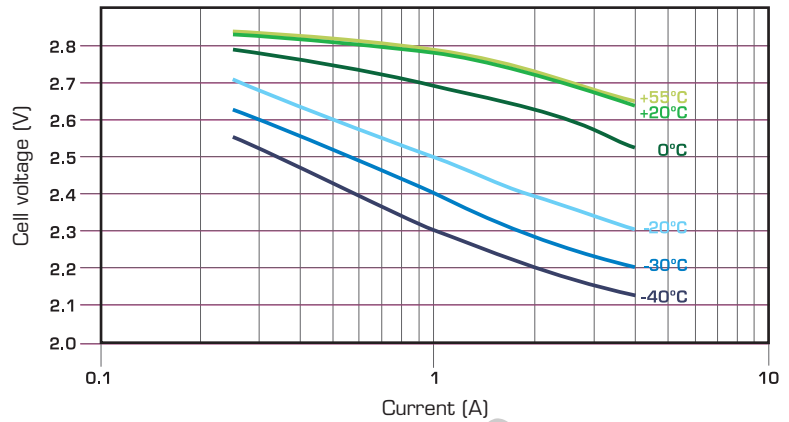


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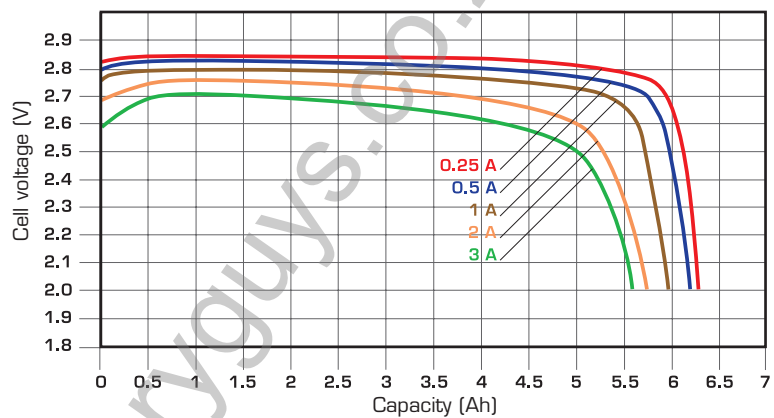


Handling precautions

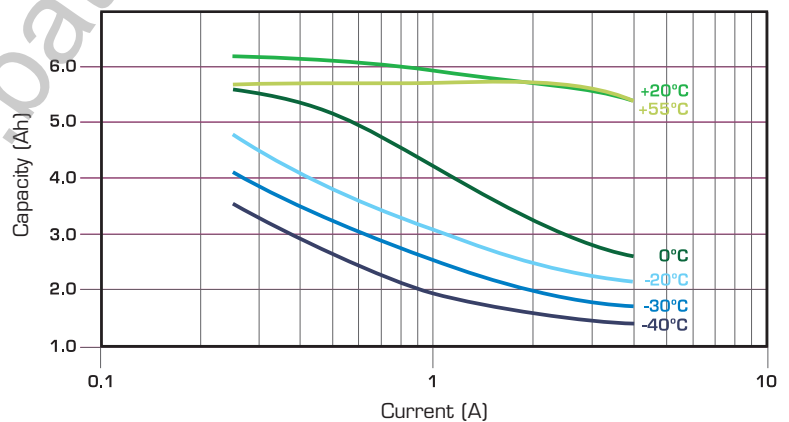
- Cell is pressurised.
- Do not puncture, open or mutilate.
- Do not obstruct the safety vent mechanism.
- Do not short circuit or charge.
- Do not expose to fire or temperatures above +70°C (+158°F).



Voltage at mid-discharge versus Current and Temperature (2.0 V cut off)



Typical discharge profiles at +20°C



Capacity versus Current and Temperature (continuous discharges - 2.0 V cut off)



SAFT