Primary lithium batteries
LST 17330

3.6V Primary lithium-thionyl chloride (Li-$SOCl_2$)
High energy density
$^2/_3$ A-size bobbin cell

For applications requesting good voltage response and operating life in -60°C/+ 85°C environments.



Key features

- High and stable operating voltage
- Low self-discharge rate *(less than 1% after 1 year of storage at + 20°C)*
- Hermetic glass-to-metal sealing
- Non-flammable electrolyte
- Compliant with IEC 86-4 safety standard and EN 50020 intrinsic safety standard
- Underwriters Laboratories (UL) Component Recognition (File Number MH 12802)
- Non-restricted for transport

Main applications

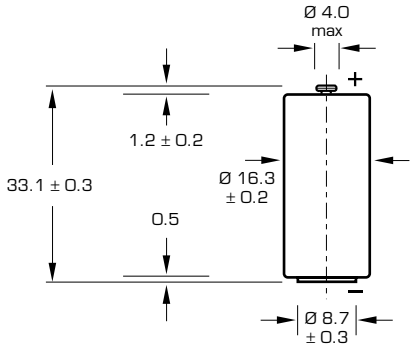
- Utility metering
- Automatic meter reading
- Alarms and security devices
- Tollgate systems
- Memory back-up
- Tracking systems
- Automotive electronics
- Professional electronics

etc...

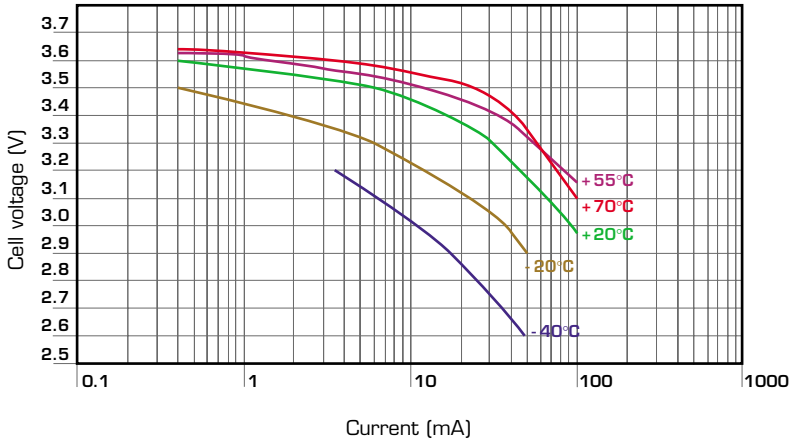
Cell size reference		**$^2/_3$ A**
Electrical characteristics		
(typical values relative to cells stored for one year or less at + 30°C max.)		
Nominal capacity *(at 3 mA + 20°C 2.0V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off).*		2.1 Ah
Open circuit voltage	(at + 20°C)	3.67V
Nominal voltage	(at 0.2 mA + 20°C)	3.6V
Pulse capability: Typically up to 120 mA *(120 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)*		25 mA
Storage	*(recommended)* *(for more severe conditions, consult Saft)*	+ 30°C (+ 86°F) max
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)
Physical characteristics		
Diameter *(max)*		16.5 mm (0.65 in)
Height *(max)*		33.4 mm (1.31 in)
Typical weight		14.4 g (0.5 oz)
Li metal content		approx. 0.6 g
Available termination suffix		
	CNR, CNR OP	rectangular radial tabs
	2 PF, 3 PF, 3 PF RP	radial pins
	CNA (AX)	axial leads

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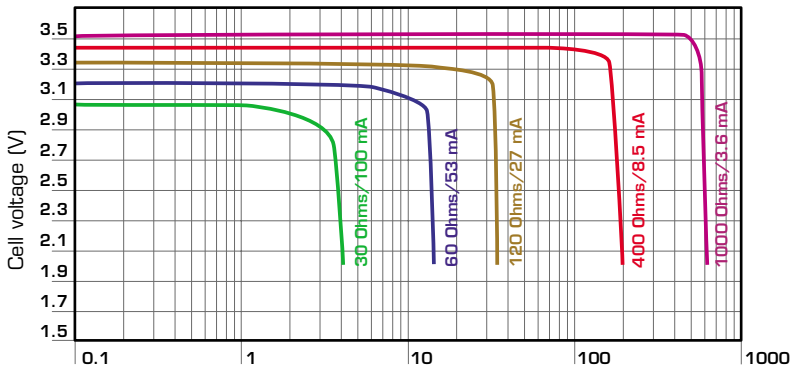
LST 17330



Dimensions in mm.



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



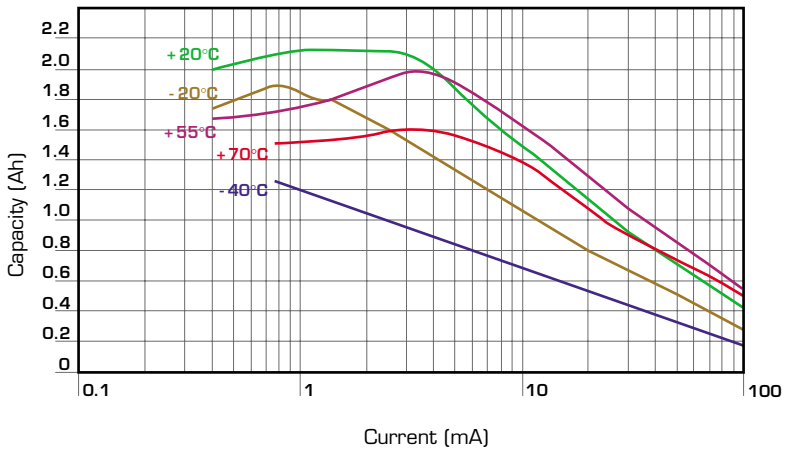
Typical discharge profiles at +20°C

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.



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

Saft
12, rue Sadi Carnot
93170 Bagnolet - France
Tel +33 1 49 93 19 18
Fax +33 1 49 93 19 69

River Drive, South Shields
Tyne & Wear, NE33 2TR - UK
Tel +44 191 456 1451
Fax +44 191 456 6383

www.saftbatteries.com

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For more details on primary lithium technologies please refer to Primary Lithium Batteries Selector Guide Doc N° 31048-2-0604.
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