

Primary lithium batteries

LS 14250 LST 14250

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

High energy density

1/2AA-size bobbin cells

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)
- Stainless steel container and end caps (low magnetic signature) for LS 14250
- 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
- LS 14250 File Number MH 12609
- LST 14250 File Number MH 12802
- Non-restricted for transport

Main applications

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

etc...

Cell size references

1/2 UM3 - 1/2 R6 - 1/2 AA

Electrical characteristics

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

Nominal capacity		1.10 Ah
<i>(at 1.5 mA + 20°C 2.0V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off).</i>		
Open circuit voltage	(at +20°C)	3.67V
Nominal voltage	(at 0.1 mA + 20°C)	3.6V
Pulse capability : Typically up to 100 mA (100 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.		40 mA
<i>(Higher currents possible, consult Saft)</i>		
Storage	(recommended) (for more severe conditions, consult Saft)	+30°C (+86°F) max
Operating temperature range		-60°C/+85°C (-76°F/+185°F)
<i>(Operation above ambient T may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult Saft)</i>		

Physical characteristics

	LS 14250	LST 14250
Diameter (max)	14.65 mm (0.58 in)	14.4 mm (0.57 in)
Height (max)	24.8 mm (0.98 in)	25.1 mm (0.99 in)
Typical weight	8.9 g (0.3 oz)	9.4 g (0.3 oz)
Li metal content	approx. 0.3 g	approx. 0.3 g

Available termination suffix

CN, CNR	radial tabs
2 PF, 3 PF, 3 PF RP, 4 PF	radial pins
CNA (AX)	axial leads
FL	flying leads ...etc.



TRANSPORTATION CERTIFICATE

Against the Transportation Certificates for the Saft battery types, Part No LST 14250 (X) and T04/8AA (X) where (X) is a standard termination, the following battery Part Nos are certified to have satisfied the requirements of :

UN Recommendations on the Transport of Dangerous Goods, Model Regulations – ST/SG/AC.10/1 Rev 12

UN Recommendations for the Transport of Dangerous Goods, Manual of Tests and Criteria – ST/SG/AC.10/11 Rev 3, Addendum 2, Annex 4, Amendments as detailed in – ST/SG/AC.10/27 Add.2.

BATTERY PART Nos

LST14250.STD, LST14250.CNR, LST14250.CNR OP, LST14250.2PF, LST14250.3PF, LST14250.3PF RP, LST14250.CNA, T04/8AA1, T04/8AA2, T04/8AA6, T04/8AA8, T04/8AA9, T04/8AA10, T04/8AA11, T3.7-170, T3.7-178, XST 5423, XST 5597, XST 5642, XST 5695, XST 5960, XST 6316

BATTERY DESCRIPTION

Primary, Non-rechargeable, Lithium-Thionyl Chloride single cell battery.

Nominal Battery Voltage	3.6 volts
Nominal Battery Capacity	1.0 Ah
Lithium content per battery	0.329g

BATTERY CLASSIFICATION

Exempt from the Dangerous Goods regulations providing packed in accordance with clause 188 section (e) of UN model regulations ST/SG/AC.10/1 Rev 12

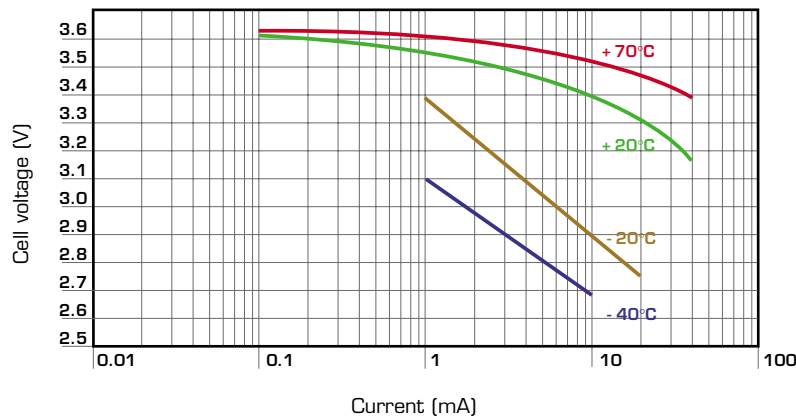
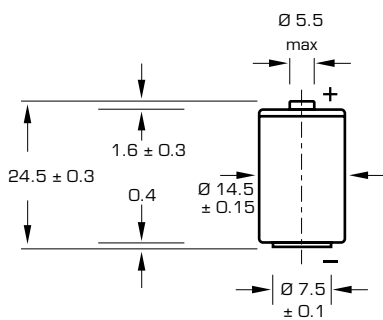
Signed on Behalf of Saft Ltd

A handwritten signature in black ink, appearing to read 'D. Eyre'.

D. Eyre, Technical Director.
Dated 02/01/03

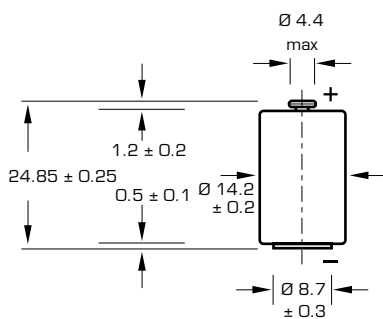
Saft Ltd, River Drive, South Shields,
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NE33 2TR

LS 14250

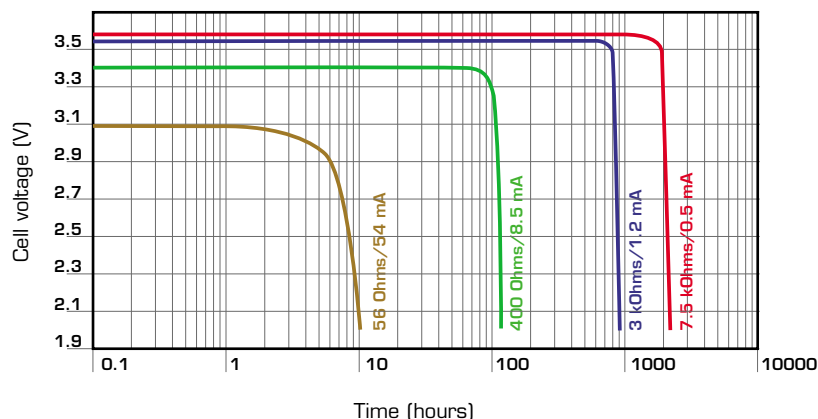


LS 14250 Voltage plateau versus Current and Temperature (at mid-discharge)

LST 14250



Dimensions in mm.



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.

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