

# Primary lithium battery

## LO 34 SX



3 V Primary lithium sulfur dioxide (Li-SO<sub>2</sub>)  
 High drain capability  
 1/3 C-size spiral cell

### Benefits

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

### Key features

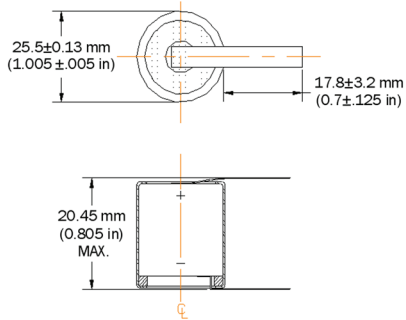
- Low self-discharge rate  
*(less than 3% after 1 year of storage at + 20° C)*
- Hermetic glass-to-metal sealing
- Built-in safety vent  
*(at the negative end of the cell)*
- UL Component Recognition  
*(File Number MH 15076)*
- Meets shock, vibration and other environmental requirements of military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

Cell size reference	1/3 um2	1/3 R14	1/3 C
<b>Electrical characteristics</b>			
Nominal capacity		1.0 Ah	
Open circuit voltage		3 V	
Nominal voltage (at 28 mA)		2.8 V	
Rated capacity (at 28 mA discharge)			
70°F (21°C)		1.0 Ah	
- 20°F (- 29°C)		0.6 Ah	
Maximum recommended continuous current		0.5 A	
Pulse capability: Typically up to 1 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 (% of rated capacity)			
1 year		70°F (21°C): >95%	
1 month		160°F (71°C): >90%	
Operating temperature range		- 40°F (- 40°C) to 160°F (71°C)	
<b>Physical characteristics</b>			
Diameter (max)		25.6 mm (1.01 in)	
Height (with radial tabs)		20.45 mm (0.085 in)	
Typical weight		.56 oz./16 gr.	
Weight of Li		0.35 gr	
Volume		0.575 in <sup>3</sup> /9.4 cc	
Standard cell comes with resin potting in the topshell area and two radial 0.15 mm inch - thick radial tabs. Other configurations available on request.			



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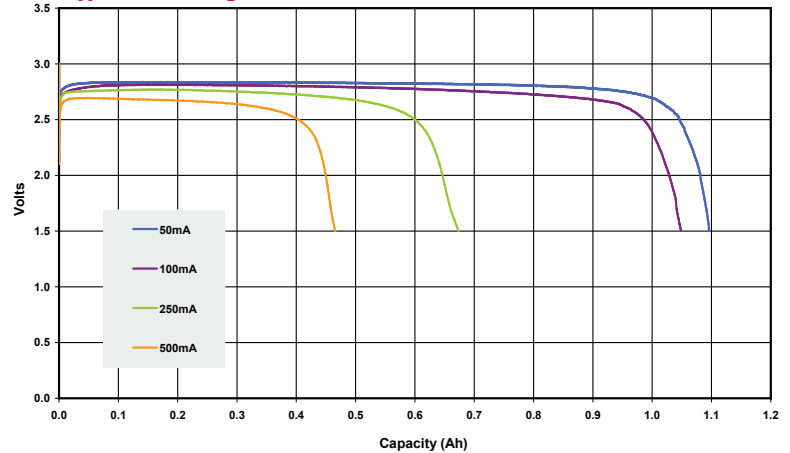
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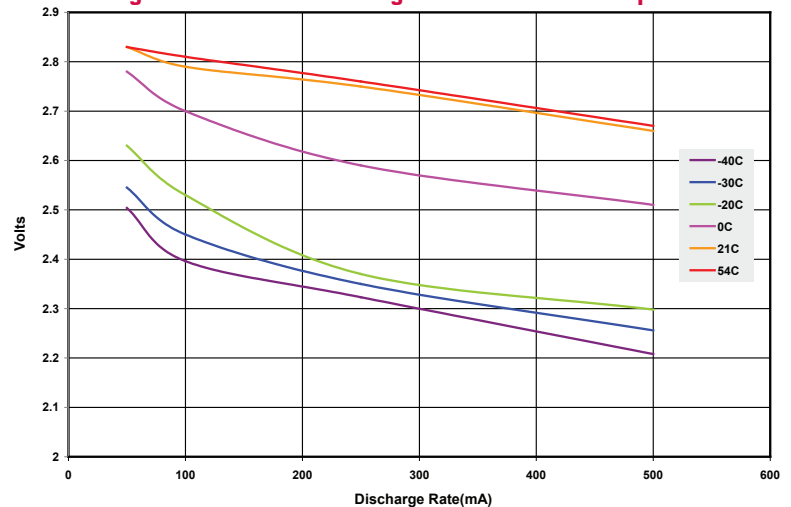
## Handling precautions

- Cell is pressurized at ambient temperature
- Do not puncture, open or mutilate
- Do not obstruct safety vent mechanism
- Do not short circuit or charge
- Do not expose to fire or temperatures above 160°F (71°C)

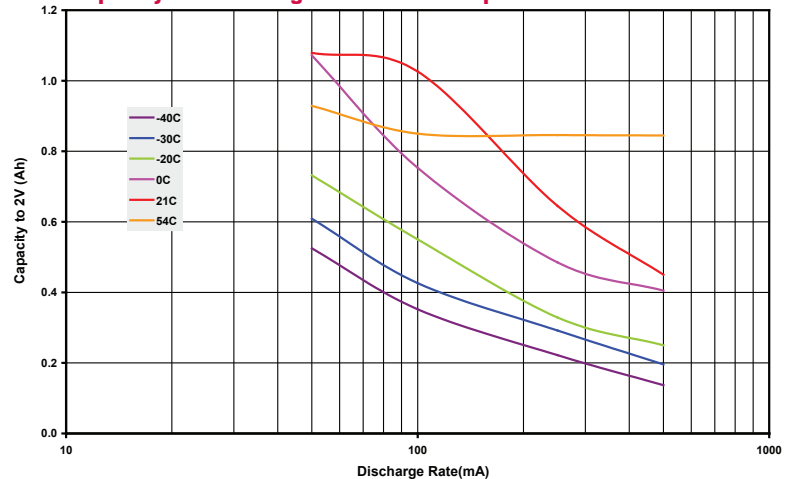
Typical discharge curves at 21°C



Voltage at midlife vs. discharge rate at various temperatures



Capacity vs. discharge at various temperatures



## 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

313 Crescent Street  
Valdese, NC 28690 - USA  
Tel.: +1 (828) 874 4111  
Fax: +1 (828) 879-3981

[www.saftbatteries.com](http://www.saftbatteries.com)

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

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