

Meter lithium battery

LS 14250 MLB

3.6 V high energy
primary Li-SOCl₂ battery
for utility meters
in demanding environments



Benefits

- Easy integration into utility meters
- High voltage, stable during most of the application's lifetime
- Wide operating temperature range
- Low self-discharge rate
(less than 1 % per year of storage at +20°C)

Key features

- 1/2 AA lithium-thionyl chloride LS 14250 component cell
- Battery with ABS plastic enclosure
- Component cell with:
 - Stainless steel container
 - Hermetic glass-to-metal sealing
 - Non-flammable electrolyte
 - Underwriters Laboratories (UL) Component Recognition
- Battery non-restricted for transport
- Manufactured in China

Main applications

- Utility metering
- Automatic meter reading
- Alarms and security devices
- Memory back-up
- Professional electronics

Electrical characteristics

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

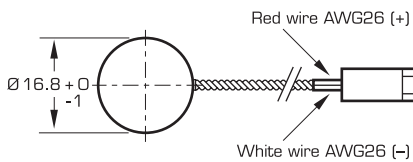
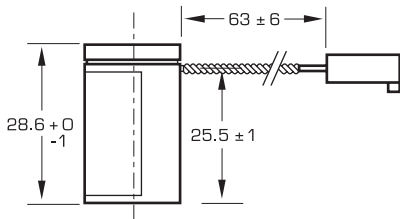
Nominal capacity		1.20 Ah
<i>(at 1 mA +20°C 2.0 V cut-off. The capacity restored by the battery varies according to current drain, temperature and cut-off)</i>		
Open circuit voltage	(at +20°C)	3.67 V
Nominal voltage	(at 0.1 mA +20°C)	3.6 V
Pulse capability: Typically up to 100 mA <i>(100 mA/0.1 second pulses, drained every 2 mn at +20°C from undischarged battery with 10 µA base current, yield voltage readings above 3.0 V. The readings may vary according to the pulse characteristics, the temperature, and the battery previous history.)</i>		
Maximum recommended continuous current		35 mA
<i>(Higher currents are possible, consult Saft)</i>		
Storage	(recommended) (for more severe conditions, consult Saft)	+30°C (+86°F) max
Operating temperature range <i>(Operation above ambient T may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult Saft)</i>		
		-60°C/+85°C (-76°F/+185°F)

Physical characteristics

Diameter (max)	16.8 mm (0.66 in)
Height (max)	28.6 mm (1.12 in)
Typical weight	15 g (0.5 oz)
Li metal content	approx. 0.3 g



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Dimensions in mm.

Storage

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

Warning

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

Saft

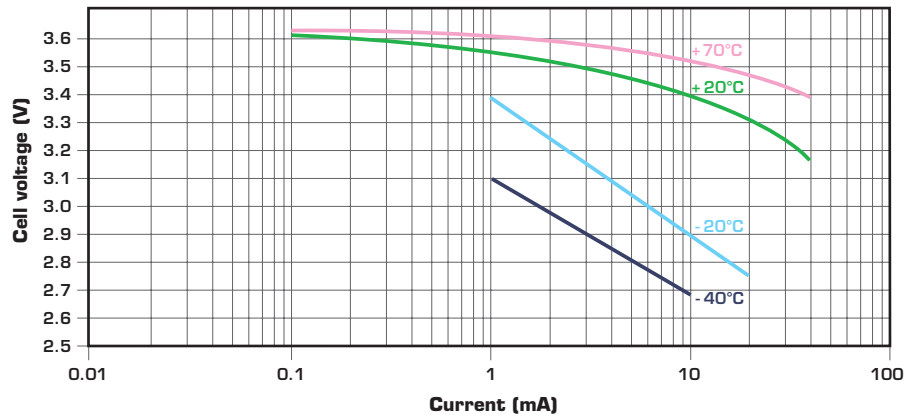
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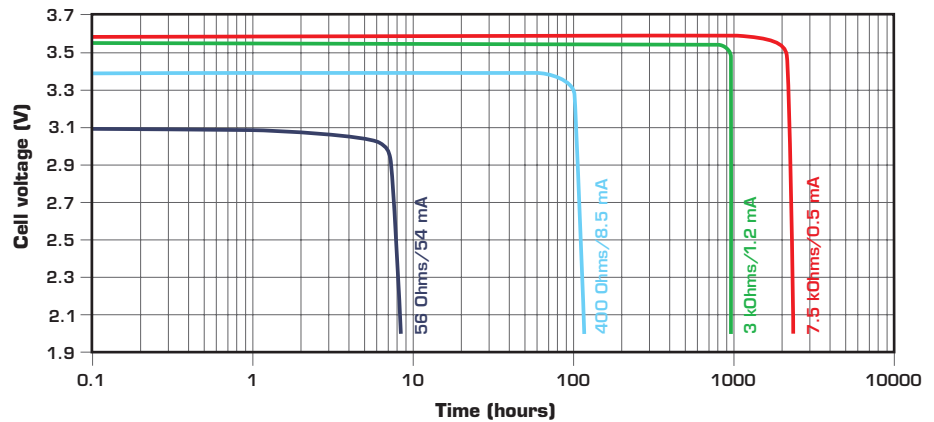
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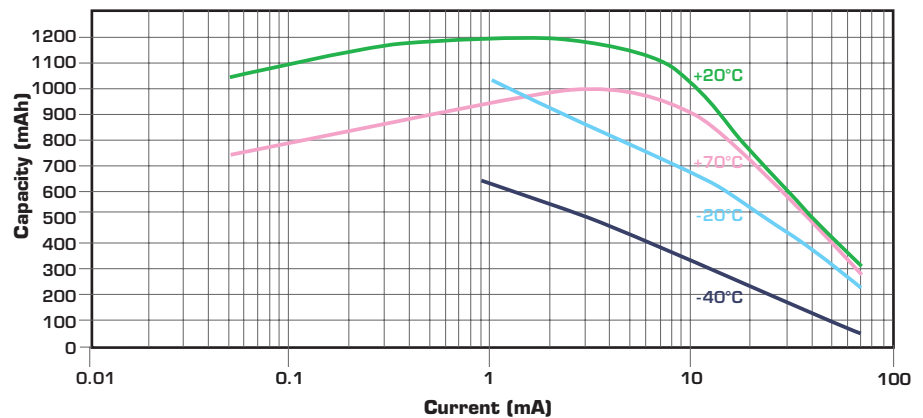
Voltage plateau versus Current and Temperature (at mid-discharge)



Typical discharge profiles at +20°C



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



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Information in this document is subject to change without notice and becomes contractual only after written confirmation by Saft.

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

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