# Primary lithium battery

## LO 40 SX

3.0 V Primary lithium-sulfur dioxide (Li-SO₂)

High drain capability

2/3 “Thin” D-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

### 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
- Restricted for transport (Class 9)
- Made in the USA

### Main applications
- Radiocommunications and other military applications
- Automotive telematics

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### Electrical characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal capacity</td>
<td>3.50 Ah</td>
</tr>
<tr>
<td>(under 120 mA +20°C cut-off)</td>
<td></td>
</tr>
<tr>
<td>Open circuit voltage</td>
<td>3.0 V</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>2.8 V</td>
</tr>
<tr>
<td>Maximum recommended continuous current</td>
<td>2.0 A</td>
</tr>
<tr>
<td>Storage (recommended)</td>
<td>+30°C (+86°F) max.</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>-60°F/-76°F</td>
</tr>
<tr>
<td>(Short excursions up to +85°C possible at currents below 1 A)</td>
<td>(2-185°F)</td>
</tr>
</tbody>
</table>

### Physical characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter (max)</td>
<td>28.95 mm (1.140 in)</td>
</tr>
<tr>
<td>Height (max; finish without radial tabs)</td>
<td>42.29 mm (1.665 in)</td>
</tr>
<tr>
<td>Typical weight</td>
<td>40 g (1.41 oz)</td>
</tr>
<tr>
<td>Li metal content</td>
<td>1.2 g</td>
</tr>
</tbody>
</table>

Standard cell comes with resin potting in the topshell area and two radial 0.15 mm - thick nickel tabs

Other configurations available on request.
Handling precautions

- Cell is pressurised at ambient temperature.
- 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).

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**Saft**

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

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