Primary lithium batteries
Selector guide

February 2005
With more than 4,000 employees, 2 R&D centers, 9 manufacturing facilities and 26 local sales organizations, a product range offering the 3 main primary lithium chemistries of today, Saft is a truly international player in the field of batteries and power supply systems for professional, industrial, space and military uses.

Among recognized characteristics of the Saft spirit worldwide are quality, performance, reliability, openness and an ability to meet the most demanding challenges. Take advantage of them for your applications!

Lithium power at your service
Lithium is a light metal which exhibits an exceptional specific capacity (3.86 Ah/gram) and unique electrochemical characteristics.

Combining lithium with manganese dioxide (MnO₂) powder or low-freezing point liquid cathode materials such as thionyl chloride (SOCl₂) or sulfur dioxide (SO₂), results in batteries with high energy, low weight, reduced self-discharge rate, and ability to operate under extreme conditions.

Saft’s lithium products
3 lithium chemistries are currently available:

- Lithium-thionyl chloride (Li-SOCl₂) in $L_5/LST/L5X/LSH$ 3.6 V cells,
- Lithium-sulfur dioxide (Li-SO₂) in $G/LO$ 3.0 V cells,
- Lithium-manganese dioxide (Li-MnO₂) in $LM$ 3.0 V cells.

For more than 31 years, Saft has pioneered the development and production of primary lithium cells and battery packs in Europe, North America and Asia/Pacific.

Autonomy, power, voltage, shape, weight, service life, price... Saft knows how to tailor battery solutions you can count on.
...exceeding your expectations

The LS and LST cells are *cylindrical* and based on the high-energy concentric “bobbin” electrode configuration. They are available in standard, “C” and “W” versions according to the temperature characteristics of the envisioned applications.

The LSX, LSH, G, LO and LM cells are also *cylindrical* but use the power-optimized “coiled” and “spiral” electrode constructions. The Li-SO₂ cells are available in “SX” and “G” standard versions and in high pulse capability “SHX” versions.

The spiral LM cell series is completed with 3 button cells aimed at memory back-up.

Corrosion-proof containers, hermetic sealing based on rugged glass-to-metal seals and TIG or laser welds, built-in safety vents and individual protection fuses are design features common to most of Saft’s lithium cells.

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**Saft primary lithium batteries: applications**

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<tr>
<td>LM buttons</td>
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<tr>
<td>LS, LST small bobbins (⅛ AA, AA, ¾ A, A)</td>
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<tr>
<td>LS large bobbins (C, D)</td>
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<td>LSH spirals</td>
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<td>LSX small coils (AA)</td>
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<td>G/LO spirals</td>
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</tr>
</tbody>
</table>

○ recommended
○ possible
Key features

Primary cells and batteries are not rechargeable.

- **High and stable operating voltage**
  - Above 3 V for LS/LST/LSX/LSH cells.
  - Above 2 V for LO/G/LM cells.

- **Wide current capability range**
  From a few microamperes base current for the LM buttons and small LS/LST cells to more than 10 A pulses for some LO, G, and LM cells.

- **Wide operating temperature range**
  From ~60°C up to +85°C depending on cell type, current drain and environment conditions.

- **Long shelf life**
  Capacity loss in storage at +20°C below 1% (LS, LST, LM), 2% (LSX) and 3% (LSH, G, LO) per year.

- **Extended operating life**
  Typically above 5 years, and up to 15 years for some applications.

- **High energy densities**
  3-10 times greater than the non-lithium systems.

- **Disposal**
  According to local regulations.

- **Adequate safety**
  Most of Saft’s lithium cells are UL (Underwriters Laboratories) recognized, non-restricted for transport and EN 50020 approved. Most battery packs comply with European and US Army standards.

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

**Saft primary lithium chemistries: specific qualities**

- **Li-SOCl₂ (LS, LST, LSX, LSH cell series)**
  - Operating voltage > 3 V
  - Ability to operate from 60 to +85°C
  - Non-flammable electrolyte
  - Cells non-pressurized at room temperature
  - Hermeticity guaranteed up to +110°C
  - Unrivaled nominal capacities (LS, LST)

- **Li-SO₂ (G, LO cell series)**
  - Non-flammable electrolyte
  - Superior pulse capability
  - Excellent capacity above 1 A
  - Superior power at ~40°C
  - Hermeticity guaranteed up to +95°C
  - Wide military acceptance

- **Li-MnO₂ (LM cell series)**
  - Non-corrosive electrolyte
  - Cells non-pressurized at room temperature
  - Spiral cells with good pulse capability
  - Minimal voltage delay
  - Competitive capacity at high current and low temperature (~40°C)

- **C** cell versions are recommended for use in Cool environments, typical of indoor applications. They yield higher voltage during pulsing at temperature not exceeding repeatedly +55°C.

- **W** cell versions are recommended for use in applications with Widely fluctuating temperature (up to +95°C), such as electronic toll collect.

- **“SHX”** cell versions offer superior pulse capability for discharges not exceeding the declared voltage cut-off.

**Saft lithium cell series: performance data**

Enclosed data relates to batteries aged up to 12 months and properly stored. Consult Saft regarding specific pulse conditions or usage following prolonged storage and/or exposure to extreme temperatures.

- Nominal capacity at +20°C and 2 V discharge cut-off (continuous current).

- Maximum recommended continuous current:
  - LS/LST/LSX bobbin and coiled cells: the current providing 50% of the nominal capacity at +20°C and 2 V cut-off.
  - LSH/G/LO/LM spirals: the above definition or the current that keeps the cells self-heating within safe limits, whichever is smaller.

- Maximum recommended pulse current: varies according to pulse characteristics (duration, frequency), temperature conditions, cell storage conditions prior to usage and the application’s acceptable minimum voltage. The use of parallel capacitor to enhance the voltage at the beginning of pulses might be recommended. Consult Saft.

Examples of standard individual cell tabbing arrangements

STD without tabs

CNR finish

CN finish

CN+ finish

CNR– finish (CNR=ST in the USA)

CN– finish

2 PF finish

3 PF finish

3 PF RP finish

CNA finish (AX in the USA)

4 PF finish

FL finish

Other cell finishes are available upon request

Check availability and dimensions of tabbing arrangement for considered cell

Examples of standard battery packs configurations

Stick

Side-by-side

Triangle

Side-by-side with end-flanges or complete casing
Exceptional performance
Primary lithium batteries

Li-SOCl₂ range

<table>
<thead>
<tr>
<th>Production site</th>
<th>Size</th>
<th>Nominal voltage</th>
<th>Open circuit voltage</th>
<th>Nominal capacity* (Drain)</th>
<th>Maximum recommended continuous current</th>
<th>Operating temperature range</th>
<th>Outside diameter max.</th>
<th>Height max.</th>
<th>Weight</th>
<th>UL recognition status</th>
</tr>
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<tbody>
<tr>
<td>Small LS/LST/LSX cells</td>
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<tr>
<td>LS 14250</td>
<td>F</td>
<td>3.67 V</td>
<td>3.6 V</td>
<td>1.1 Ah (1 mA)</td>
<td>40 mA</td>
<td>-60/+ 85°C**</td>
<td>14.65 mm</td>
<td>24.8 mm</td>
<td>8.9 g</td>
<td>yes Non-restricted</td>
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<tr>
<td>LST 14250</td>
<td>UK</td>
<td>3.67 V</td>
<td>3.6 V</td>
<td>1.1 Ah (1 mA)</td>
<td>40 mA</td>
<td>-60/+ 85°C**</td>
<td>14.4 mm</td>
<td>25.1 mm</td>
<td>9.4 g</td>
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<tr>
<td>LS 14250C</td>
<td>F</td>
<td>3.67 V</td>
<td>3.6 V</td>
<td>1.2 Ah (1 mA)</td>
<td>15 mA</td>
<td>-60/+ 55°C**</td>
<td>14.65 mm</td>
<td>24.8 mm</td>
<td>8.9 g</td>
<td>yes Non-restricted</td>
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<tr>
<td>LS 14500</td>
<td>F</td>
<td>3.67 V</td>
<td>3.6 V</td>
<td>2.25 Ah (1 mA)</td>
<td>100 mA</td>
<td>-60/+ 85°C**</td>
<td>14.65 mm</td>
<td>50.3 mm</td>
<td>16.2 g</td>
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<td>3.67 V</td>
<td>3.6 V</td>
<td>2.25 Ah (1 mA)</td>
<td>100 mA</td>
<td>-60/+ 85°C**</td>
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<td>49.8 mm</td>
<td>17.4 g</td>
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<td>LS 14500C</td>
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<td>3.6 V</td>
<td>2.7 Ah (1 mA)</td>
<td>25 mA</td>
<td>-60/+ 55°C**</td>
<td>14.4 mm</td>
<td>50.3 mm</td>
<td>16.2 g</td>
<td>yes Non-restricted</td>
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<tr>
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<td>3.6 V</td>
<td>2.2 Ah (1 mA)</td>
<td>60 mA</td>
<td>-60/+ 95°C**</td>
<td>14.65 mm</td>
<td>50.3 mm</td>
<td>16.2 g</td>
<td>yes Non-restricted</td>
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<td>LSX 14500</td>
<td>F</td>
<td>3.67 V</td>
<td>3.6 V</td>
<td>2.1 Ah (1 mA)</td>
<td>150 mA</td>
<td>-60/+ 85°C**</td>
<td>14.65 mm</td>
<td>50.3 mm</td>
<td>17.5 g</td>
<td>yes Non-restricted</td>
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<td>3.6 V</td>
<td>2.1 Ah (2 mA)</td>
<td>25 mA</td>
<td>-60/+ 85°C**</td>
<td>16.5 mm</td>
<td>33.4 mm</td>
<td>14.4 g</td>
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<tr>
<td>LS 17500</td>
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<td>3.67 V</td>
<td>3.6 V</td>
<td>3.4 Ah (2 mA)</td>
<td>150 mA</td>
<td>-60/+ 85°C**</td>
<td>17.0 mm</td>
<td>50.9 mm</td>
<td>21.9 g</td>
<td>yes Non-restricted</td>
</tr>
</tbody>
</table>

* 2 V cut-off  ** Cells leakproof up to +120°C

| Large LS cells |
| LS 26500 | F | 3.67 V | 3.6 V | 7.7 Ah (4 mA) | 150 mA | -60/+ 85°C** | 26.0 mm | 49.1 to 50.4 mm*** | 48 g | yes Class 9 |
| LS 33600 | F | 3.67 V | 3.6 V | 17.0 Ah (5 mA) | 250 mA | -60/+ 85°C** | 33.4 mm | 60.2 to 61.6 mm*** | 90 g | yes Class 9 |
| LS 33600C | F | 3.67 V | 3.6 V | 18.5 Ah (1 mA) | 80 mA | -60/+ 55°C** | 33.4 mm | 60.2 to 61.6 mm*** | 90 g | yes Class 9 |

* 2 V cut-off  ** Cells leakproof up to +110°C  *** Depending on cell finish

| LSH spiral cells |
| LSH 26180 | F | 3.67 V | 3.6 V | 1.2 Ah (10 mA) | 400 mA | -60/+ 85°C** | 26.2 mm | 18.6 mm | 24 g | — Non-restricted |
| LSH 14 | F | 3.67 V | 3.6 V | 5.5 Ah (15 mA) | 1300 mA | -60/+ 85°C** | 26.0 mm | 50.4 mm | 51 g | yes Class 9 |
| LSH 14 "light" | F | 3.67 V | 3.6 V | 3.6 Ah (15 mA) | 1300 mA | -60/+ 85°C | 26.0 mm | 50.4 mm | 51 g | — Non-restricted |
| LSH 20 | F | 3.67 V | 3.6 V | 13.0 Ah (15 mA) | 1800 mA | -60/+ 85°C** | 33.4 mm | 61.6 mm | 100 g | yes Class 9 |

* 2 V cut-off  ** Cells leakproof up to +110°C  All LSH cells are fitted with individual 5 Amp fuse protection

Primary cells and batteries are not rechargeable.

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Li-SOCl₂ Military battery packs

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<th>Voltage cut-off</th>
<th>Rated capacity</th>
<th>Maximum dimensions</th>
<th>Weight</th>
<th>Safety features</th>
<th>NATO stock number</th>
<th>Typical applications</th>
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<td>PS 31 A</td>
<td>1s1p LSH 26180</td>
<td>3.67 V</td>
<td>3.5 V</td>
<td>2 V</td>
<td>1.2 Ah</td>
<td>26.2 x 18.9 mm</td>
<td>25 g</td>
<td>PTC 1.1 A**</td>
<td>6135-14-376-4875</td>
<td>Night vision</td>
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<tr>
<td>PS 38 A</td>
<td>5s1p LSH 26180</td>
<td>18 V</td>
<td>17.5 V</td>
<td>10 V</td>
<td>1.2 Ah</td>
<td>110.7 x 37 mm</td>
<td>155 g</td>
<td>PTC 1.1 A**</td>
<td>6135-14-389-9050</td>
<td>Laser telemetry</td>
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<td>PS 40 A</td>
<td>4s1p LSH 14</td>
<td>14.7 V</td>
<td>14 V</td>
<td>10 V</td>
<td>4.6 Ah</td>
<td>108 x 65 x 49 mm</td>
<td>285 g</td>
<td>PTC 1.1 A**</td>
<td>6135-14-420-1760</td>
<td>Radiocommunication (TRPP 11/13)</td>
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<tr>
<td>PS 42 A</td>
<td>2s1p LSH 20</td>
<td>7.3 V</td>
<td>7 V</td>
<td>5 V</td>
<td>9.0 Ah</td>
<td>69.9 x 67.2 x 34 mm</td>
<td>230 g</td>
<td>PTC 3.5 A**</td>
<td>6135-14-4340766</td>
<td>Radiocommunication (TRPP 39)</td>
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<td>PS 48 B</td>
<td>5s2p LSH 20</td>
<td>18.3 V</td>
<td>17.5 V</td>
<td>12.6 V</td>
<td>18.0 Ah</td>
<td>212.4 x 72.7 x 68.5 mm</td>
<td>1150 g</td>
<td>PTC 1.85 A**</td>
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<td>2s1p LSH 20</td>
<td>7.3 V</td>
<td>7.2 V</td>
<td>5 V</td>
<td>12.5 Ah</td>
<td>77.5 x 63.5 x 34.6 mm</td>
<td>225 g</td>
<td>PTC 2.0 A**</td>
<td>6135-14-459-9265</td>
<td>Radiocommunication (Portable PR4G)</td>
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<td>PS 53 B</td>
<td>6s1p LSH 20</td>
<td>22 V</td>
<td>21 V</td>
<td>15 V</td>
<td>12.5 Ah</td>
<td>210.5 x 68.5 x 37.5 mm</td>
<td>720 g</td>
<td>PTC 2.5 A**</td>
<td>6135-14-459-9266</td>
<td>Radiocommunication (Portable PR4G)</td>
</tr>
</tbody>
</table>

* Xs Yp = Y parallel branches of X cells in series per branch
** Maximum hold current

Primary cells and batteries are not rechargeable.

This data sheet is an insert part of the Primary lithium batteries Selector guide (ref 31048-2), where complementary information and data on features, safety and storage can be found.

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Société anonyme au capital de 91 944 000 € RCS Bobigny B 383 703 873
Produced by Arthur Associates Limited.
Primary lithium batteries
Li-SO₂ range

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<th>Size</th>
<th>Open circuit voltage</th>
<th>Nominal voltage</th>
<th>Nominal capacity (drain)</th>
<th>Maximum recommended continuous current</th>
<th>Operating temperature range</th>
<th>Outside diameter max.</th>
<th>Height max.</th>
<th>Weight</th>
<th>UL recognition</th>
<th>Transport status</th>
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<td>G/LO spiral cells</td>
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</tr>
<tr>
<td>G 04/3</td>
<td>UK</td>
<td>1/2 AA</td>
<td>3 V</td>
<td>2.9 V</td>
<td>450 mAh (50 mA)</td>
<td>250 mA</td>
<td>−60/+70°C*</td>
<td>14.2 mm</td>
<td>27.9 mm</td>
<td>8 g</td>
<td>Non-restricted</td>
</tr>
<tr>
<td>G 06/2</td>
<td>UK</td>
<td>AA</td>
<td>3 V</td>
<td>2.9 V</td>
<td>950 mAh (100 mA)</td>
<td>1000 mA</td>
<td>−60/+70°C*</td>
<td>14.2 mm</td>
<td>50.3 mm</td>
<td>15 g</td>
<td>Non-restricted</td>
</tr>
<tr>
<td>G 32/3</td>
<td>UK</td>
<td>2/3 A</td>
<td>3 V</td>
<td>2.9 V</td>
<td>800 mAh (80 mA)</td>
<td>750 mA</td>
<td>−60/+70°C*</td>
<td>16.3 mm</td>
<td>34.5 mm</td>
<td>12 g</td>
<td>Non-restricted</td>
</tr>
<tr>
<td>G 36/2</td>
<td>UK</td>
<td>“long” A</td>
<td>3 V</td>
<td>2.9 V</td>
<td>1700 mAh (100 mA)</td>
<td>1500 mA</td>
<td>−60/+70°C*</td>
<td>16.3 mm</td>
<td>57.7 mm</td>
<td>18 g</td>
<td>Non-restricted</td>
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<td>LO 34 SX</td>
<td>USA</td>
<td>1/2 C</td>
<td>3 V</td>
<td>2.9 V</td>
<td>860 mAh (80 mA)</td>
<td>1000 mA</td>
<td>−60/+70°C*</td>
<td>25.9 mm</td>
<td>20.3 mm</td>
<td>18 g</td>
<td>Yes, non-restricted</td>
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<td>LO 35 SX</td>
<td>USA</td>
<td>2/3 C</td>
<td>3 V</td>
<td>2.9 V</td>
<td>2000 mAh (120 mA)</td>
<td>2000 mA</td>
<td>−60/+70°C*</td>
<td>25.9 mm</td>
<td>35.9 mm</td>
<td>30 g</td>
<td>Yes, Class 9</td>
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<td>G 52/3</td>
<td>UK</td>
<td>C</td>
<td>3 V</td>
<td>2.9 V</td>
<td>3200 mAh (1000 mA)</td>
<td>2500 mA</td>
<td>−60/+70°C*</td>
<td>25.6 mm</td>
<td>49.5 mm</td>
<td>47 g</td>
<td>Class 9</td>
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<td>LO 29 SHX</td>
<td>USA</td>
<td>C</td>
<td>3 V</td>
<td>2.9 V</td>
<td>3750 mAh (270 mA)</td>
<td>2500 mA</td>
<td>−60/+70°C*</td>
<td>25.9 mm</td>
<td>50.4 mm</td>
<td>40 g</td>
<td>Yes, Class 9</td>
</tr>
<tr>
<td>G 54/3</td>
<td>UK</td>
<td>5/4 C</td>
<td>3 V</td>
<td>2.9 V</td>
<td>5000 mAh (200 mA)</td>
<td>2500 mA</td>
<td>−60/+70°C*</td>
<td>25.6 mm</td>
<td>60.2 mm</td>
<td>58 g</td>
<td>Class 9</td>
</tr>
<tr>
<td>LO 43 SHX</td>
<td>USA</td>
<td>5/4 C</td>
<td>3 V</td>
<td>2.9 V</td>
<td>5000 mAh (200 mA)</td>
<td>2500 mA</td>
<td>−60/+70°C*</td>
<td>25.9 mm</td>
<td>59.3 mm</td>
<td>53 g</td>
<td>Yes, Class 9</td>
</tr>
<tr>
<td>LO 40 SHX</td>
<td>USA</td>
<td>“fat” D</td>
<td>3 V</td>
<td>2.9 V</td>
<td>3500 mAh (120 mA)</td>
<td>2000 mA</td>
<td>−60/+70°C*</td>
<td>29.1 mm</td>
<td>41.6 mm</td>
<td>40 g</td>
<td>Yes, Class 9</td>
</tr>
<tr>
<td>LO 30 SHX</td>
<td>USA</td>
<td>“thin” D</td>
<td>3 V</td>
<td>2.9 V</td>
<td>5750 mAh (200 mA)</td>
<td>3000 mA</td>
<td>−60/+70°C*</td>
<td>29.1 mm</td>
<td>59.9 mm</td>
<td>63 g</td>
<td>Yes, Class 9</td>
</tr>
<tr>
<td>G 20/2</td>
<td>UK</td>
<td>D</td>
<td>3 V</td>
<td>2.9 V</td>
<td>7750 mAh (250 mA)</td>
<td>3000 mA</td>
<td>−60/+70°C*</td>
<td>33.3 mm</td>
<td>61.0 mm</td>
<td>88 g</td>
<td>Class 9</td>
</tr>
<tr>
<td>LO 26 SX</td>
<td>USA</td>
<td>D</td>
<td>3 V</td>
<td>2.9 V</td>
<td>7750 mAh (250 mA)</td>
<td>3000 mA</td>
<td>−60/+70°C*</td>
<td>34.2 mm</td>
<td>59.3 mm</td>
<td>65 g</td>
<td>Class 9</td>
</tr>
<tr>
<td>LO 26 SXC</td>
<td>USA</td>
<td>D</td>
<td>3 V</td>
<td>2.8 V</td>
<td>9200 mAh (250 mA)</td>
<td>2500 mA</td>
<td>−60/+70°C*</td>
<td>34.2 mm</td>
<td>59.3 mm</td>
<td>65 g</td>
<td>Class 9</td>
</tr>
<tr>
<td>LO 26 SHX</td>
<td>USA</td>
<td>D</td>
<td>3 V</td>
<td>2.9 V</td>
<td>7500 mAh (1000 mA)</td>
<td>4000 mA</td>
<td>−60/+70°C*</td>
<td>34.2 mm</td>
<td>59.3 mm</td>
<td>65 g</td>
<td>Yes, Class 9</td>
</tr>
<tr>
<td>LO 25 SX</td>
<td>USA</td>
<td>“fat” D</td>
<td>3 V</td>
<td>2.9 V</td>
<td>8000 mAh (270 mA)</td>
<td>2500 mA</td>
<td>−60/+70°C*</td>
<td>39.5 mm</td>
<td>50.3 mm</td>
<td>96 g</td>
<td>Yes, Class 9</td>
</tr>
<tr>
<td>LO 39 SHX</td>
<td>USA</td>
<td>F</td>
<td>3 V</td>
<td>2.9 V</td>
<td>11000 mAh (300 mA)</td>
<td>3000 mA</td>
<td>−60/+70°C*</td>
<td>30.7 mm</td>
<td>99.4 mm</td>
<td>125 g</td>
<td>Yes, Class 9</td>
</tr>
<tr>
<td>G 22/6</td>
<td>UK</td>
<td>DD</td>
<td>3 V</td>
<td>2.9 V</td>
<td>16500 mAh (500 mA)</td>
<td>3000 mA</td>
<td>−60/+70°C*</td>
<td>33.3 mm</td>
<td>120.6 mm</td>
<td>175 g</td>
<td>Class 9</td>
</tr>
<tr>
<td>G 62/1</td>
<td>UK</td>
<td>“long fat” DD</td>
<td>3 V</td>
<td>2.9 V</td>
<td>34000 mAh (1000 mA)</td>
<td>3000 mA</td>
<td>−60/+70°C*</td>
<td>41.7 mm</td>
<td>141.0 mm</td>
<td>300 g</td>
<td>Class 9</td>
</tr>
</tbody>
</table>

* Cells leakproof up to +95°C

Primary cells and batteries are not rechargeable.
### Li-SO₂ Military Battery Packs

<table>
<thead>
<tr>
<th>Cell type construction</th>
<th>Open circuit voltage</th>
<th>Nominal voltage</th>
<th>Voltage cut-off</th>
<th>Rated capacity</th>
<th>Maximum dimensions</th>
<th>Weight</th>
<th>NATO stock number</th>
<th>Typical applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 5112/U</td>
<td>4s1p LO 35 SX</td>
<td>11.6 V</td>
<td>11.2 V</td>
<td>8 V</td>
<td>2.0 Ah</td>
<td>77.8 x 57.2 x 39.1 mm</td>
<td>180 g</td>
<td>6135-01-235-4168</td>
</tr>
<tr>
<td>BA 5557/U</td>
<td>5s2p LO 35 SX</td>
<td>14.7 V/29.5 V</td>
<td>14 V/28 V</td>
<td>10 V/20 V</td>
<td>4 Ah/2 Ah</td>
<td>100.1 x 106.3 x 37.3 mm</td>
<td>500 g</td>
<td>6135-01-088-2707</td>
</tr>
<tr>
<td>BA 5567/U</td>
<td>5s1p LO 34 SX</td>
<td>2.95 V</td>
<td>2.9 V</td>
<td>2 V</td>
<td>0.86 Ah</td>
<td>25.9 x 19.9 mm</td>
<td>16 g</td>
<td>6135-01-080-9363</td>
</tr>
<tr>
<td>BA 5588/U</td>
<td>5s1p LO 40 SX</td>
<td>14.7 V</td>
<td>14 V</td>
<td>10 V</td>
<td>3.5 Ah</td>
<td>96 x 90 x 31 mm</td>
<td>205 g</td>
<td>6135-00-088-2708</td>
</tr>
<tr>
<td>BA 5950/U</td>
<td>5s1p LO 26 SX</td>
<td>14.7 V</td>
<td>14 V/28 V</td>
<td>10 V/20 V</td>
<td>7.5 Ah</td>
<td>127 x 111.8 x 82 mm</td>
<td>1020 g</td>
<td>6135-01-C38-3495</td>
</tr>
<tr>
<td>BA 5958/U</td>
<td>5s1p LO 25 SX</td>
<td>14.7 V</td>
<td>14 V</td>
<td>14 V</td>
<td>8.0 Ah</td>
<td>120.7 x 92 x 54 mm</td>
<td>680 g</td>
<td>6135-01-C34-2239</td>
</tr>
<tr>
<td>BA 5999/U</td>
<td>3s1p LO 25 SX</td>
<td>8.8 V</td>
<td>8.4 V</td>
<td>6 V</td>
<td>7.5 Ah</td>
<td>152 x 38 x 64 mm</td>
<td>450 g</td>
<td>6135-01-C34-2239</td>
</tr>
<tr>
<td>BA 5600/U</td>
<td>3s1p LO 26 SX</td>
<td>8.8 V</td>
<td>8.4 V</td>
<td>4 V</td>
<td>7.5 Ah</td>
<td>185.9 x 39.4 mm</td>
<td>360 g</td>
<td>6135-01-168-2944</td>
</tr>
<tr>
<td>BA 5790/U</td>
<td>5s1p LO 26 SX</td>
<td>14.7 V</td>
<td>14 V</td>
<td>10 V</td>
<td>7.5 Ah</td>
<td>186.5 x 35.7 x 66.7 mm</td>
<td>630 g</td>
<td>N/A</td>
</tr>
<tr>
<td>BA 5791/U</td>
<td>5s2p LO 26 SX</td>
<td>14.7 V</td>
<td>14 V</td>
<td>10 V</td>
<td>15 Ah</td>
<td>186.5 x 70.0 x 65.3 mm</td>
<td>1.2 g</td>
<td>N/A</td>
</tr>
<tr>
<td>BA 5800/U</td>
<td>2s1p LO 26 SX</td>
<td>5.9 V</td>
<td>5.6 V</td>
<td>4 V</td>
<td>7.5 Ah</td>
<td>128.5 x 25.5 mm</td>
<td>220 g</td>
<td>6135-99-798-9851</td>
</tr>
<tr>
<td>BA 5847/U</td>
<td>2s1p LO 26 SX</td>
<td>5.9 V</td>
<td>5.4 V</td>
<td>4 V</td>
<td>7.5 Ah</td>
<td>95 x 64.9 x 38 mm</td>
<td>240 g</td>
<td>6135-01-080-5364</td>
</tr>
<tr>
<td>BT 5313/U</td>
<td>5s1p LO 26 SX</td>
<td>26.5 V</td>
<td>25.2 V</td>
<td>18 V</td>
<td>7.2 Ah</td>
<td>Special</td>
<td>1.1 kg</td>
<td>N/A</td>
</tr>
<tr>
<td>Li/3</td>
<td>4s1p LO 30 SX</td>
<td>8.8 V</td>
<td>8.4 V</td>
<td>6 V</td>
<td>7.5 Ah</td>
<td>110 x 42 x 26.2 mm</td>
<td>450 g</td>
<td>6135-14-383-9768</td>
</tr>
<tr>
<td>G6-104/ (C,D,E,F,G,H)</td>
<td>2s1p GD2</td>
<td>5.9 V</td>
<td>5.6 V</td>
<td>4 V</td>
<td>7.5 Ah</td>
<td>128.5 x 35.5 mm</td>
<td>200 g</td>
<td>-</td>
</tr>
<tr>
<td>G6-105</td>
<td>2s1p GD2</td>
<td>5.9 V</td>
<td>5.6 V</td>
<td>4 V</td>
<td>3.2 Ah</td>
<td>55 x 28.1 x 56 mm</td>
<td>110 g</td>
<td>6135-99-968-9085</td>
</tr>
<tr>
<td>G9-124</td>
<td>3s1p GD2</td>
<td>8.8 V</td>
<td>8.4 V</td>
<td>6 V</td>
<td>7.5 Ah</td>
<td>110 x 42 x 83 mm</td>
<td>370 g</td>
<td>6135-14-383-9768</td>
</tr>
<tr>
<td>G15-114</td>
<td>5s2p GD2</td>
<td>14.7 V</td>
<td>14 V</td>
<td>8.6 V</td>
<td>1.9 Ah</td>
<td>90.6 x 40.3 x 71 mm</td>
<td>270 g</td>
<td>6135-99-795-4351</td>
</tr>
<tr>
<td>G15-127</td>
<td>2s1p GD2</td>
<td>2x14.7 V</td>
<td>2x14 V</td>
<td>2x10 V</td>
<td>34 or 68 Ah</td>
<td>216 x 152 x 92 mm</td>
<td>3.5 kg</td>
<td>6135-99-794-2898</td>
</tr>
<tr>
<td>G18-115</td>
<td>3s1p GD2</td>
<td>17.5 V</td>
<td>16.8 V</td>
<td>12 V</td>
<td>7.5 Ah</td>
<td>131.6 x 68.8 x 128 mm</td>
<td>0.85 kg</td>
<td>6135-99-795-4350</td>
</tr>
<tr>
<td>G30-101</td>
<td>10s1p GD2</td>
<td>29.3 V</td>
<td>28 V</td>
<td>20 V</td>
<td>7.5 Ah</td>
<td>184.5 x 73.5 x 80 mm</td>
<td>1.5 kg</td>
<td>6135-99-747-4430</td>
</tr>
<tr>
<td>G30-102/8</td>
<td>10s1p GD2</td>
<td>29.3 V</td>
<td>28 V</td>
<td>20 V</td>
<td>16 Ah</td>
<td>184 x 72.5 x 133 mm</td>
<td>2.5 kg</td>
<td>6135-99-840-0108</td>
</tr>
<tr>
<td>XSG 1433/1</td>
<td>5s1p GD2</td>
<td>14.7 V</td>
<td>14 V</td>
<td>10 V</td>
<td>8.5 Ah</td>
<td>78.5 x 37.2 x 40 mm</td>
<td>170 g</td>
<td>-</td>
</tr>
</tbody>
</table>

* Xs Yp = Y parallel branches of X cells in series per branch

Primary cells and batteries are not rechargeable.

This data sheet is an insert part of the Primary lithium batteries Selector guide (ref 31048-2), where complementary information and data on features, safety and storage can be found.

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Single cells mentioned in this document may have their own specific data sheet with complementary data. Please check website.  
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RCS Bobigny B 383 703 873  
Produced by Arthur Associates Limited.
Primary lithium batteries

Li-MnO₂ range

Li-MnO₂ cells

<table>
<thead>
<tr>
<th>Production size</th>
<th>Open circuit voltage</th>
<th>Nominal voltage</th>
<th>Nominal capacity (drain)</th>
<th>Maximum recommended continuous current</th>
<th>Operating temperature range</th>
<th>Outside diameter max.</th>
<th>Height max.</th>
<th>Weight</th>
<th>UL recognition</th>
<th>Transport status</th>
</tr>
</thead>
<tbody>
<tr>
<td>LM 2032</td>
<td>F 20 x 3.2 mm</td>
<td>3 V</td>
<td>235 mA (0.2 mA)</td>
<td>3 mA</td>
<td>-20/+60°C</td>
<td>20.0 mm</td>
<td>3.2 mm</td>
<td>2.9 g</td>
<td>yes</td>
<td>Non-restricted</td>
</tr>
<tr>
<td>LM 2430</td>
<td>F 24.5 x 3 mm</td>
<td>3 V</td>
<td>285 mA (0.2 mA)</td>
<td>3 mA</td>
<td>-20/+60°C</td>
<td>24.5 mm</td>
<td>3.0 mm</td>
<td>4.0 g</td>
<td>yes</td>
<td>Non-restricted</td>
</tr>
<tr>
<td>LM 2450</td>
<td>F 24.5 x 5 mm</td>
<td>3 V</td>
<td>540 mA (0.2 mA)</td>
<td>3 mA</td>
<td>-20/+60°C</td>
<td>24.5 mm</td>
<td>5.0 mm</td>
<td>6.0 g</td>
<td>yes</td>
<td>Non-restricted</td>
</tr>
</tbody>
</table>

* Operating temperature range extended to -20/+70°C for the resin-encapsulated Memoguard 40 LH or LF 220 versions

LM spiral cells

<table>
<thead>
<tr>
<th>Cell type construction*</th>
<th>Open circuit voltage</th>
<th>Nominal voltage</th>
<th>Voltage cut-off</th>
<th>Nominal capacity</th>
<th>Maximum dimensions</th>
<th>Weight</th>
<th>NATO stock number</th>
<th>Typical applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>LM 17130 USA 1/3 A</td>
<td>3.3 V</td>
<td>3 V</td>
<td>500 mA (4.5 mA to 2.0 V)</td>
<td>1600 mA</td>
<td>-40/+70°C</td>
<td>14.6 mm</td>
<td>15.0 g</td>
<td>Non-restricted</td>
</tr>
<tr>
<td>LM 22150 USA 1/3 sub-C</td>
<td>3.3 V</td>
<td>3 V</td>
<td>600 mA (6 mA to 2.0 V)</td>
<td>1200 mA</td>
<td>-40/+70°C</td>
<td>17.3 mm</td>
<td>15.0 g</td>
<td>Non-restricted</td>
</tr>
<tr>
<td>LM 26500 UK C</td>
<td>3.3 V</td>
<td>3 V</td>
<td>1500 mA (150 mA to 2.0 V)</td>
<td>3000 mA</td>
<td>-40/+70°C</td>
<td>25.6 mm</td>
<td>60.0 g</td>
<td>Class 9</td>
</tr>
<tr>
<td>LM 26600 UK 5/4 C</td>
<td>3.3 V</td>
<td>3 V</td>
<td>1500 mA (150 mA to 2.0 V)</td>
<td>3000 mA</td>
<td>-40/+70°C</td>
<td>25.6 mm</td>
<td>61.5 mm</td>
<td>Class 9</td>
</tr>
<tr>
<td>LM 33570 UK &quot;short&quot; D</td>
<td>3.3 V</td>
<td>3 V</td>
<td>9000 mA (1000 mA)</td>
<td>30000 mA</td>
<td>-40/+70°C</td>
<td>34.0 mm</td>
<td>116.0 g</td>
<td>Class 9</td>
</tr>
<tr>
<td>LM 33600 UK D</td>
<td>3.3 V</td>
<td>3 V</td>
<td>10500 mA (1000 mA)</td>
<td>30000 mA</td>
<td>-40/+70°C</td>
<td>34.0 mm</td>
<td>116.0 g</td>
<td>Class 9</td>
</tr>
</tbody>
</table>

* Cells leakproof up to +80°C

Li-MnO₂ Military battery packs

<table>
<thead>
<tr>
<th>Cell type construction*</th>
<th>Open circuit voltage</th>
<th>Nominal voltage</th>
<th>Voltage cut-off</th>
<th>Nominal capacity</th>
<th>Maximum dimensions</th>
<th>Weight</th>
<th>NATO stock number</th>
<th>Typical applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 5368/U 4s1p LM 22150</td>
<td>13.2 V</td>
<td>12 V</td>
<td>9 V</td>
<td>900 mAh</td>
<td>76.2 x 26.9 mm</td>
<td>145 g</td>
<td>6135-01-455-7947</td>
<td>Radiocommunication</td>
</tr>
<tr>
<td>BA 5372/U 2s1p LM 17130</td>
<td>6.6 V</td>
<td>6 V</td>
<td>4 V</td>
<td>500 mAh</td>
<td>16.5 x 33.0 mm</td>
<td>20 g</td>
<td>6135-01-214-6441</td>
<td>Radiocommunication</td>
</tr>
</tbody>
</table>

* Xs Yp = Y parallel branches of X cells in series per branch

Primary cells and batteries are not rechargeable.

This data sheet is an insert part of the Primary lithium batteries Selector guide (ref 31048-2), where complementary information and data on features, safety and storage can be found.

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