

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06

Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81

Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16

Россия (495)268-04-70

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13

Казахстан (772)734-952-31

Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

www.sft.nt-rt.ru | | sfq@nt-rt.ru

Технические характеристики на первичные литий-серно-диоксидные батареи LO, G

Primary lithium battery

LO 34 SX



3 V Primary lithium sulfur dioxide (Li-SO₂)
 High drain capability
 1/3 C-size spiral cell

Benefits

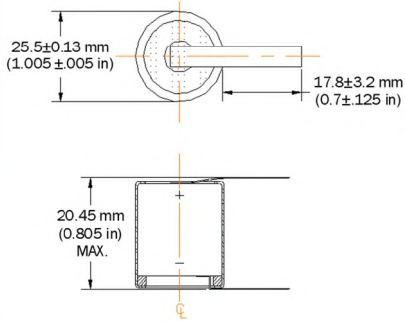
- High and stable discharge voltage
- High pulse capability
- Performance not affected by cell orientation
- Long storage possible before use
- Ability to withstand extreme temperature
- Non-restricted for transport

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
Electrical characteristics			
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)	
Physical characteristics			
Diameter (max)		25.6 mm (1.01 in)	
Height (with radial tabs)		20.45 mm (0.805 in)	
Typical weight		.56 oz./16 gr.	
Weight of Li		0.35 gr	
Volume		0.575 in ³ /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.			

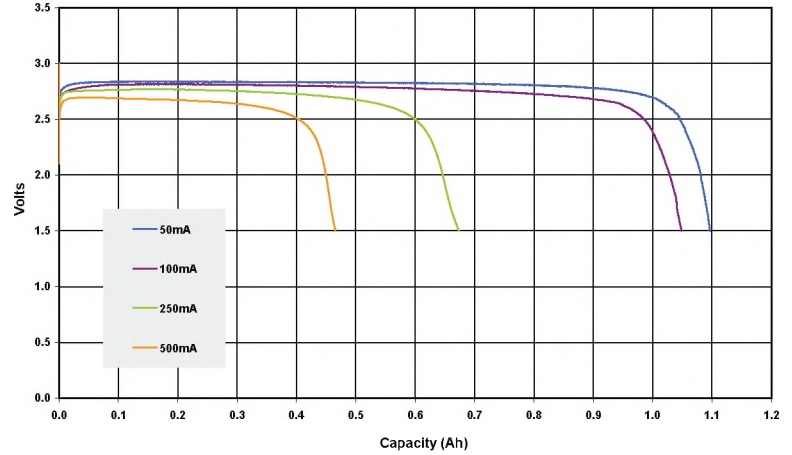
LO 34 SX



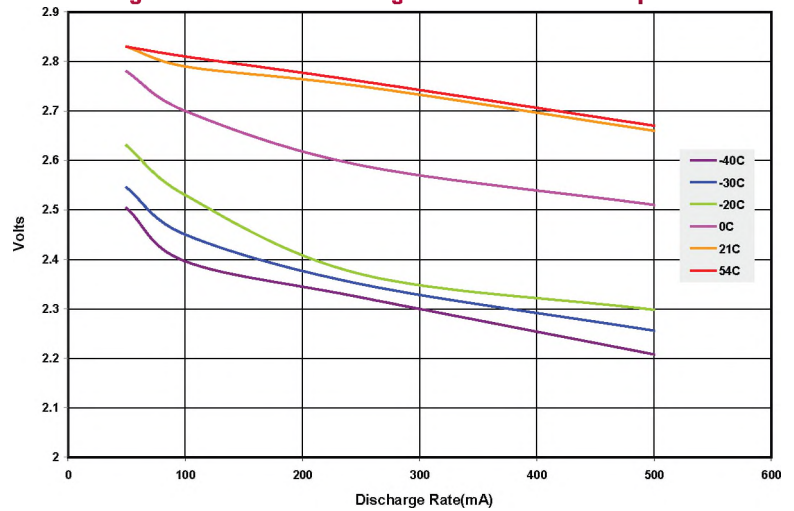
Handling precautions

- 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)

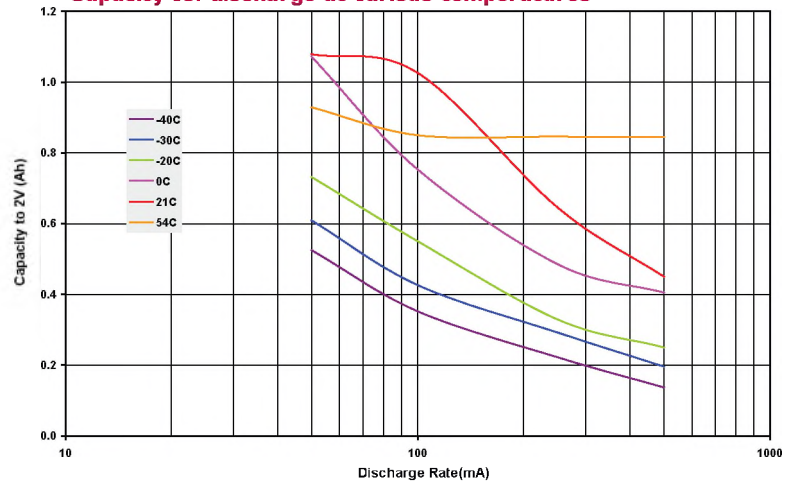
Typical discharge curves at 21°C



Voltage at midlife vs. discharge rate at various temperatures



Capacity vs. discharge at various temperatures



Primary lithium batteries

LO 30 SHX

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

Very high drain and pulse capability

“Thin” D-size spiral cell



Benefits

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

Key features

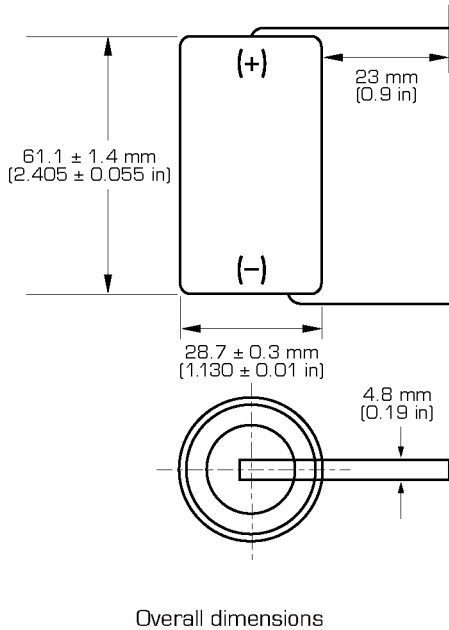
- Low self-discharge rate
(less than 3% after 1 year of storage at +20°C)
- Hermetic glass-to-metal sealing
- Built-in safety vent
(at the negative end of the cell)
- Restricted for transport *(class 9)*
- UL Component Recognition
(File Number MH 15076)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in the USA

Main applications

- Radiocommunications and other military applications
- Beacons and Emergency Location Transmitters
- Sonobuoys

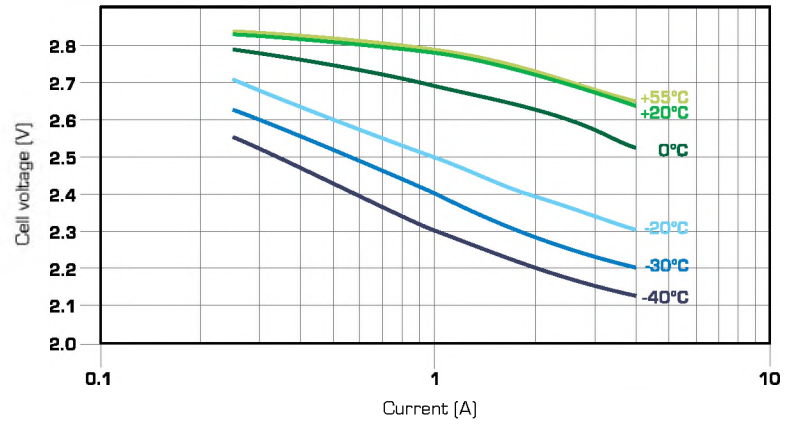
Cell size reference		“Thin” D
Electrical characteristics		
<i>(typical values for cells stored for one year or less)</i>		
Nominal capacity <i>(at 0.2 A +20°C 2.0 V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off)</i>		5.75 Ah
Open circuit voltage (at +20°C)		3.0 V
Nominal voltage (at 0.6 A +21°C/+70°F)		2.8 V
Maximum recommended continuous current <i>(to avoid over-heating. Higher currents possible, consult Saft)</i>		3 A
Pulse capability : Typically up to 10 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 <i>(recommended possible without leakage)</i>		+30°C (+86°F) max -60°C/+85°C (-76°F/+185°F)
Operating temperature range <i>(Short excursions up to +85°C possible at currents below 1 A)</i>		-60°C/+70°C (-76°F/+158°F)
Physical characteristics		
Diameter <i>(max)</i>		29.0 mm (1.14 in)
Height <i>(max)</i>		62.5 mm (2.46 in)
Typical weight		63 g (2.21 oz)
Li metal content		1.9 g
Standard cell comes with resin potting in the topshell area and two radial 0.15 mm - thick nickel tabs		
Different configurations available on request.		

LO 30 SHX

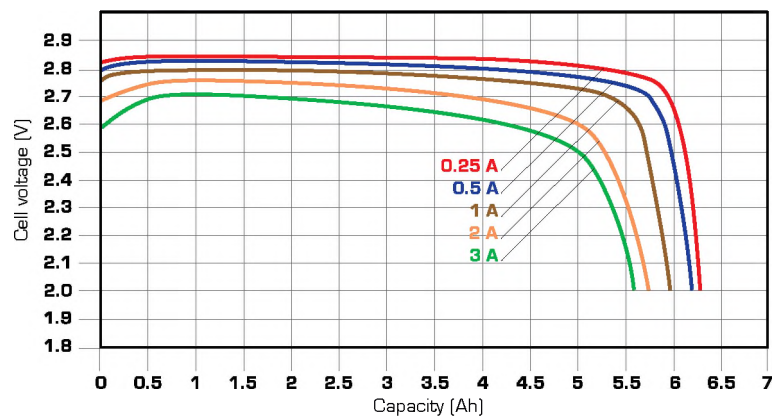


Handling precautions

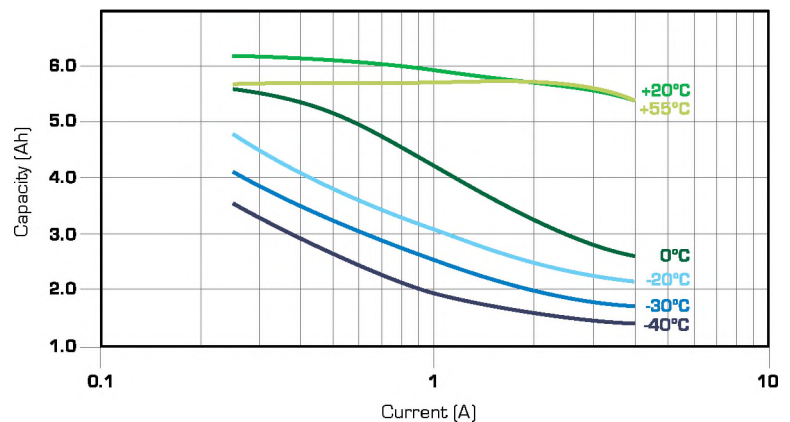
- Cell is pressurised.
- Do not puncture, open or mutilate.
- Do not obstruct the safety vent mechanism.
- Do not short circuit or charge.
- Do not expose to fire or temperatures above +70°C (+158°F).



Voltage at mid-discharge versus Current and Temperature (2.0 V cut off)



Typical discharge profiles at +20°C



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

Primary lithium batteries

LO 29 SHX

3.0 V Primary lithium-sulfur dioxide (Li-SO₂)
 Very high drain and pulse capability
 C-size spiral cell



Benefits

- High and stable discharge voltage
- Superior 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)
- Restricted for transport *(class 9)*
- UL Component Recognition
(File Number MH 15076)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in the USA

Main applications

- Radiocommunications and other military applications
- Rescue devices (PLBs, EPIRBs)
- Sonobuoys

Cell size reference

R14 - C

Electrical characteristics

(typical values for cells stored for one year or less)

Nominal capacity <i>(at 0.25 A +20°C 2.0 V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off)</i>	3.75 Ah
--	---------

Open circuit voltage (at +20°C)	3.0 V
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Nominal voltage (at 0.4 A +20°C)	2.8 V
----------------------------------	-------

Maximum recommended continuous current <i>(to avoid over-heating. Higher currents possible, consult Saft)</i>	2.5 A
--	-------

Pulse capability : Typically up to 6 A.
(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)

Storage <i>(recommended possible without leakage)</i>	+30°C (+86°F) max -60°C / +85°C (-76°F / +185°F)
--	--

Operating temperature range <i>(Short excursions up to +85°C possible at currents below 1 A)</i>	-60°C / +70°C (-76°F +158°F)
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Physical characteristics

Diameter <i>(max)</i>	25.6 mm (1.00 in)
-----------------------	-------------------

Height <i>(max; finish without radial tabs)</i>	50.4 mm (1.98 in)
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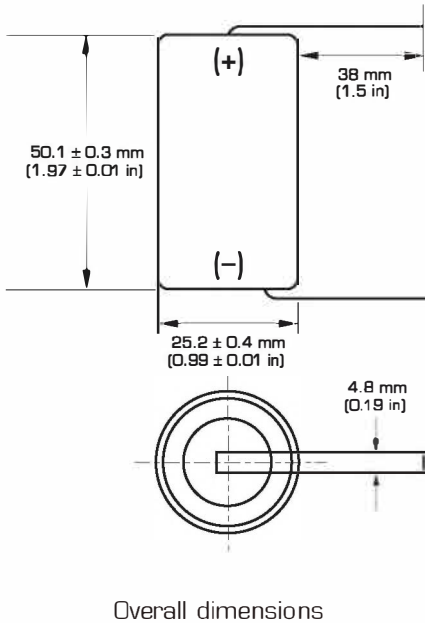
Typical weight	40 g (1.4 oz)
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Li metal content	1.2 g
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Standard cell comes with resin potting in the topshell area and two radial 0.15 mm - thick nickel tabs

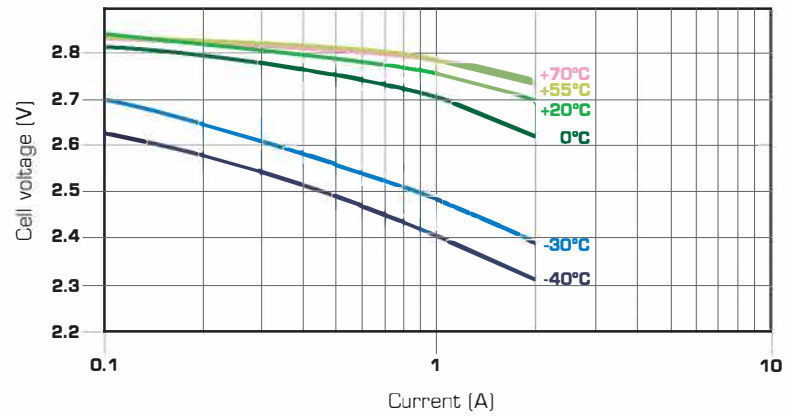
Different configurations available on request.

LO 29 SHX

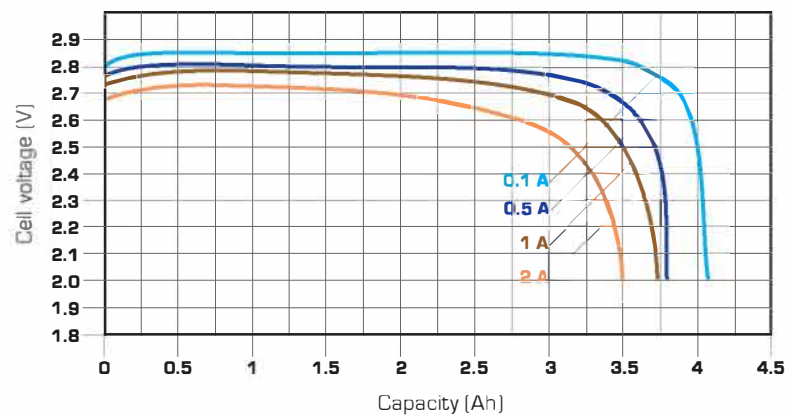


Handling precautions

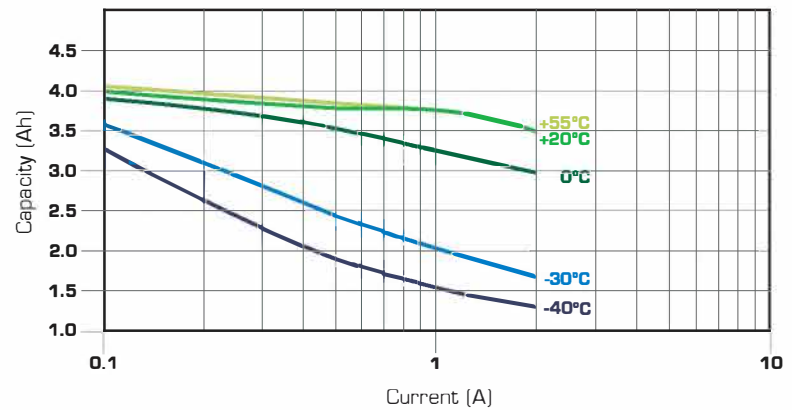
- Cell is pressurised.
- Do not puncture, open or mutilate.
- Do not obstruct the safety vent mechanism.
- Do not short circuit or charge.
- Do not expose to fire or temperatures above +70°C (+158°F).



Voltage at mid-discharge versus Current and Temperature (2.0 V cut off)



Typical discharge profiles at +20°C



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

Primary lithium batteries

LO 26 SXC

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

High capacity, 9.2 Ah

High drain D-size cell

Key features

- Enhanced capacity
- High and stable discharge voltage
- Performance not affected by cell orientation
- 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)
- Restricted for transport (class 9)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in the USA

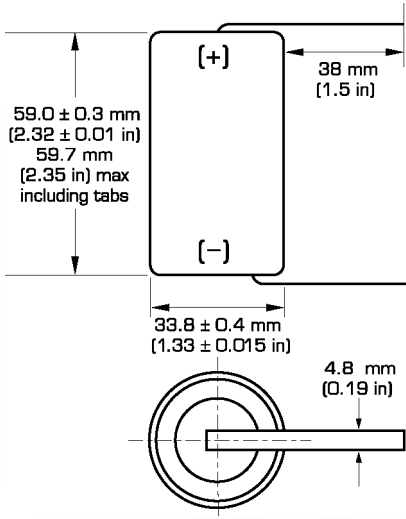
Main applications

- Radiocommunications and other military applications
- Beacons and Emergency Location Transmitters
- Sonobuoys
- Missiles

etc...

Cell size reference		R20 - D
Electrical characteristics		
<i>(typical values for cells stored for one year or less)</i>		
Nominal capacity <i>(at 250 mA +20°C 2.0 V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off).</i>		9.2 Ah
Open circuit voltage (at +20°C)		3.0 V
Nominal voltage (at 0.5 A +20°C)		2.8 V
Maximum recommended continuous current <i>(to avoid over-heating. Higher currents possible, consult Saft).</i>		2.5 A
Pulse capability : Up to 10 A. <i>Varies according to pulse characteristics (frequency, duration), temperature, cell history (storage conditions prior to usage) and the application's acceptable minimum voltage. Consult Saft.</i>		
Storage <i>(recommended)</i> <i>(possible without leakage)</i>		+30°C /+86°F max -60°C (-76°F) / +85°C (+185°F)
Operating temperature range		-60°C (-76°F) / +71°C (+160°F)
<i>(Short excursions up to 85°C possible at currents below 1 A).</i>		
Physical characteristics		
Diameter <i>(max)</i>		34.2 mm (1.345 in)
Height <i>(max; finish without radial tabs)</i>		59.3 mm (2.33 in)
Typical weight		85 g (3 oz)
Li metal content		2.7 g
Standard cell comes with resin potting in the topshell area and two radial 0.15 mm - thick nickel tabs		
Finish with positive button on request		
Finish with individual fuse on request		

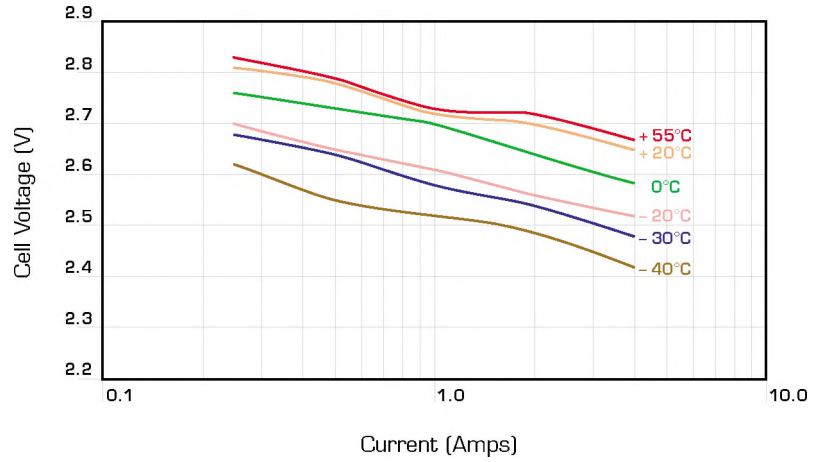
LO 26 SXC



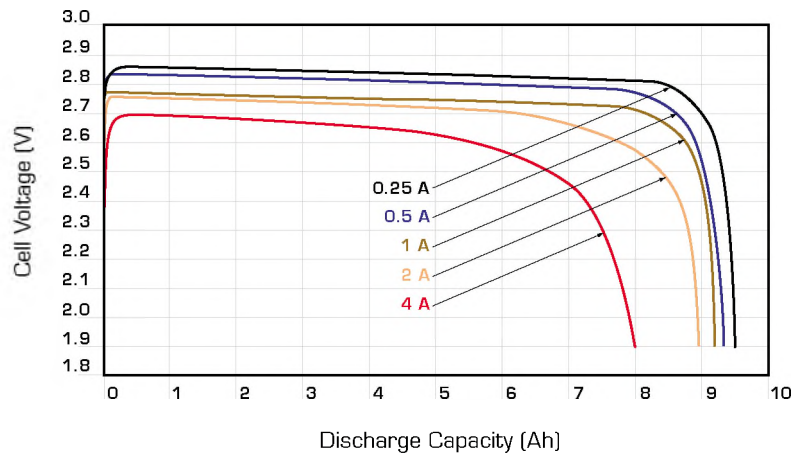
Overall dimensions

Handling precautions

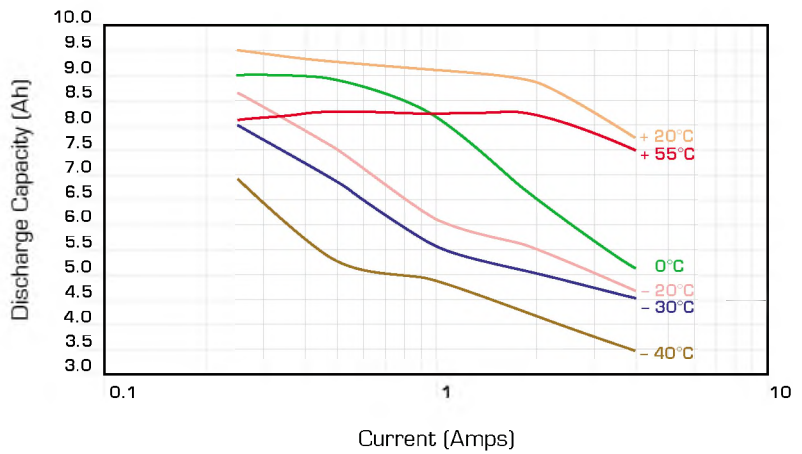
- Cell is pressurized.
- Do not puncture, open or mutilate.
- Do not obstruct the safety vent mechanism.
- Do not short circuit or charge.
- Do not expose to fire or temperatures above +70°C (+160°F).



Voltage at mid-discharge versus Current and Temperature (2.0 V cut off)



Typical discharge profiles at +20°C



Capacity versus Current and Temperature - 2.0 V cut off)

Primary lithium batteries

LO 26 SX

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

High drain capability

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}
- Restricted for transport *{class 9}*
- UL Component Recognition
{File Number MH 15076}
- Meets shock, vibration and other environmental requirements of military specifications
- Made in the USA

Main applications

- Radiocommunications and other military applications
- Beacons and Emergency Location Transmitters
- Sonobuoys
- Missiles

Cell size reference

R20 - D

Electrical characteristics

{typical values for cells stored for one year or less}

Nominal capacity	7.75 Ah
------------------	---------

{at 0.25 A +20°C 2.0 V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off}

Open circuit voltage (at +20°C)	3.0 V
---------------------------------	-------

Nominal voltage (at 0.5 A +20°C)	2.8 V
----------------------------------	-------

Maximum recommended continuous current <i>{to avoid over-heating. Higher currents possible, consult Saft}</i>	2.5 A
--	-------

Pulse capability : Typically up to 5 A.
{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}

Storage	<i>{recommended}</i> <i>{possible without leakage}</i>	+30°C (+86°F) max -60°C/+85°C <i>{-76°F/+185°F}</i>
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Operating temperature range <i>{Short excursions up to +85°C possible at currents below 1 A}</i>	-60°C/+70°C <i>{-76°F/+158°F}</i>
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Physical characteristics

Diameter <i>{max}</i>	34.2 mm (1.345 in)
-----------------------	--------------------

Height <i>{max; finish without radial tabs}</i>	59.3 mm (2.33 in)
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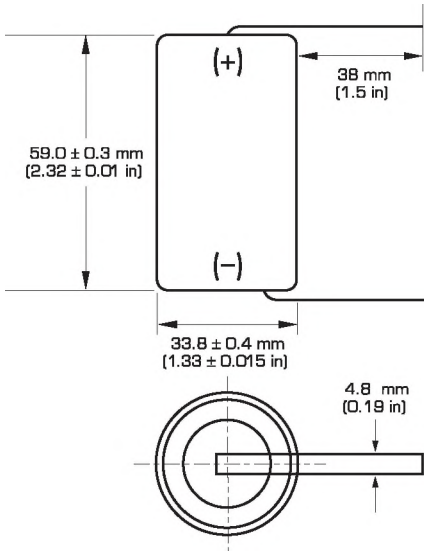
Typical weight	85 g (3 oz)
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Li metal content	2.4 g
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Standard cell comes with resin potting in the topshell area and two radial 0.15 mm - thick nickel tabs

Different configurations available on request.

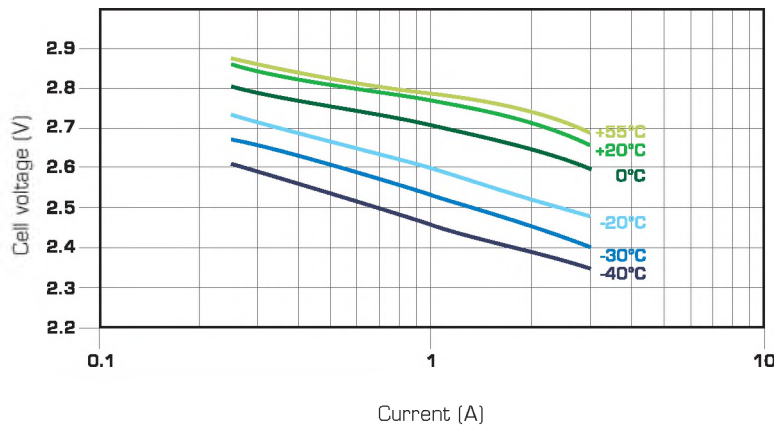
LO 26 SX



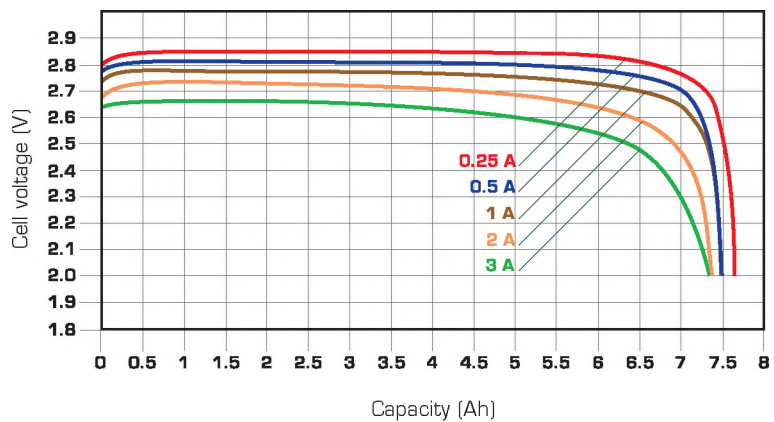
Overall dimensions

Handling precautions

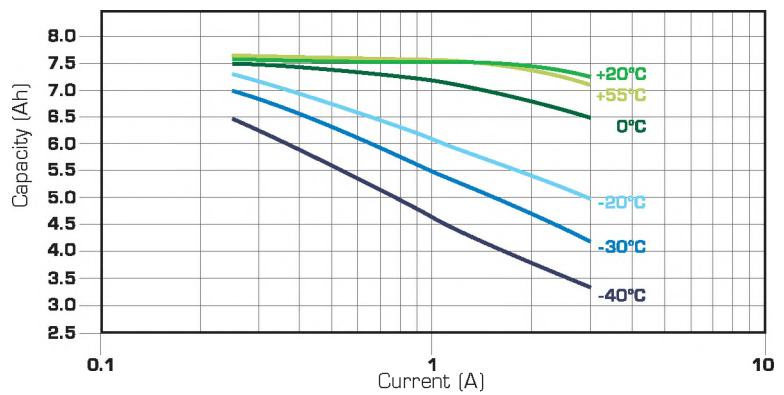
- Cell is pressurised.
- Do not puncture, open or mutilate.
- Do not obstruct the safety vent mechanism.
- Do not short circuit or charge.
- Do not expose to fire or temperatures above +70°C (+158°F).



Voltage at mid-discharge versus Current and Temperature (2.0 V cut off)



Typical discharge profiles at +20°C



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

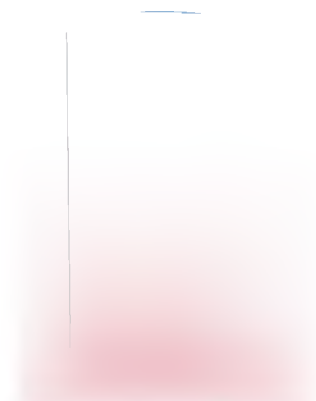
Primary lithium batteries

LO 26 SHX

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

Very high drain and pulse capability

D-size spiral cell



Benefits

- Superior drain and pulse capability
- High and stable discharge voltage
- 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)
- Restricted for transport *(class 9)*
- UL Component Recognition
(File Number MH 15076)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in the USA

Main applications

- Radiocommunications and other military applications
- Beacons and Emergency Location Transmitters
- Sonobuoys
- Missiles
- Cardiac defibrillators

Cell size reference

R20 - D

Electrical characteristics

(typical values for cells stored for one year or less)

Nominal capacity <i>(at 1 A +20°C 2.0 V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off)</i>	7.5 Ah
---	--------

Open circuit voltage (at +20°C)	3.0 V
---------------------------------	-------

Nominal voltage (at 0.8 A +20°C)	2.8 V
----------------------------------	-------

Maximum recommended continuous current <i>(to avoid over-heating. Higher currents possible, consult Saft)</i>	4 A
--	-----

Pulse capability : Typically up to 15 A.
(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)

Storage <i>(recommended possible without leakage)</i>	+30°C (+86°F) max -60°C / +85°C (-76°F / +185°F)
--	--

Operating temperature range <i>(Short excursions up to +85°C possible at currents below 1 A)</i>	-60°C / +70°C (-76°F / +158°F)
---	-----------------------------------

Physical characteristics

Diameter <i>(max)</i>	34.2 mm (1.345 in)
-----------------------	--------------------

Height <i>(max; finish without radial tabs)</i>	59.3 mm (2.33 in)
---	-------------------

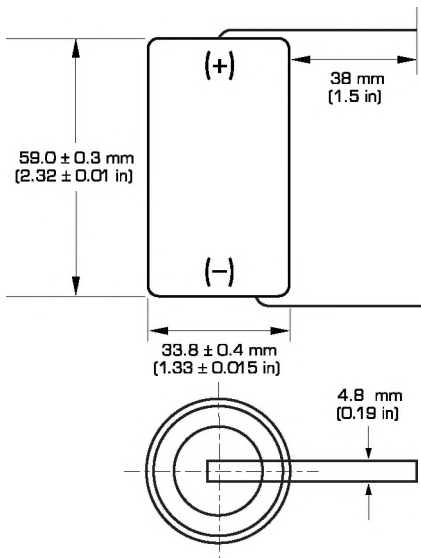
Typical weight	85 g (3 oz)
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Li metal content	2.3 g
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Standard cell comes with resin potting in the topshell area and two radial 0.15 mm - thick nickel tabs

Different configurations available on request.

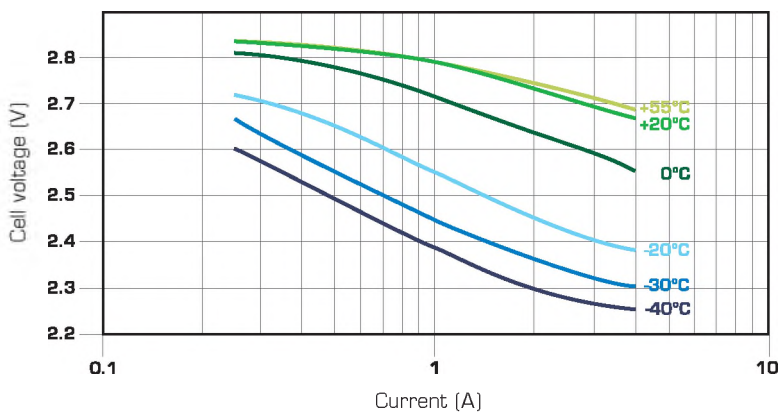
LO 26 SHX



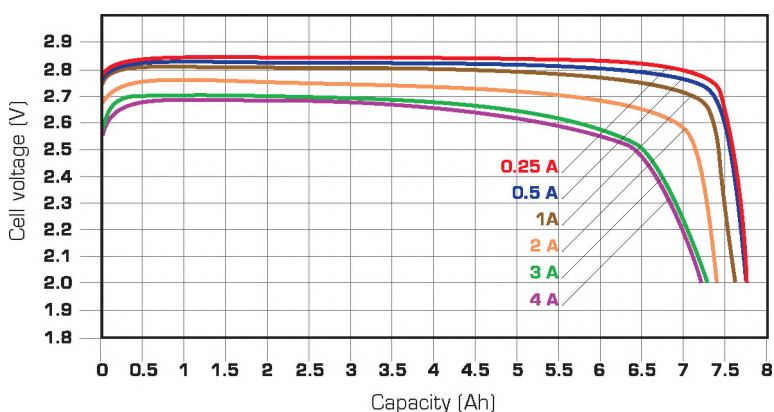
Overall dimensions

Handling precautions

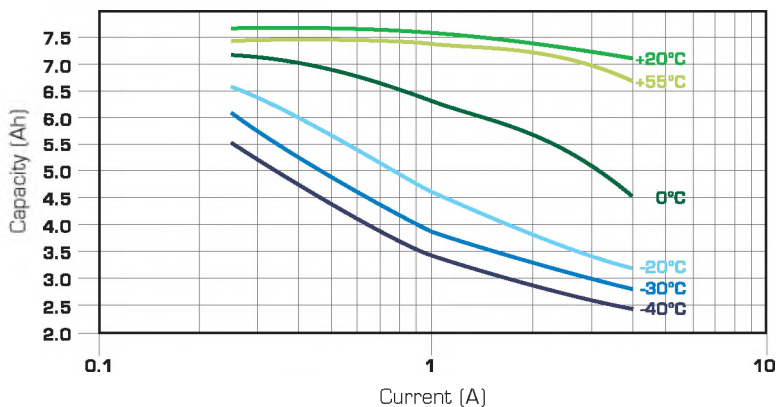
- Cell is pressurised.
- Do not puncture, open or mutilate.
- Do not obstruct the safety vent mechanism.
- Do not short circuit or charge.
- Do not expose to fire or temperatures above +70°C (+158°F).



Voltage at mid-discharge versus Current and Temperature (2.0 V cut off)



Typical discharge profiles at +20°C



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

Primary lithium batteries

LO 25 SX

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

High drain capability

“Fat” D-size spiral cell



Benefits

- High and stable discharge voltage
- Very 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)
- Restricted for transport *(class 9)*
- UL Component Recognition
(File Number MH 15076)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in the USA

Main applications

- Radiocommunications and other military applications
- Beacons and Emergency Location Transmitters
- Sonobuoys
- Missiles

Cell size reference

“Fat” D

Electrical characteristics

(typical values for cells stored for one year or less)

Nominal capacity 8.0 Ah
(at 0.27 A +20°C 2.0 V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off)

Open circuit voltage (at +20°C) 3.0 V

Nominal voltage (at 0.6 A +20°C) 2.8 V

Maximum recommended continuous current 2.5 A
(to avoid over-heating. Higher currents possible, consult Saft)

Pulse capability : Typically up to 10 A.
(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)

Storage *(recommended)* +30°C (+86°F) max
(possible without leakage) -60°C / +85°C
(-76°F / +185°F)

Operating temperature range -60°C / +70°C
(-76°F / +158°F)

(Short excursions up to +85°C possible at currents below 1 A)

Physical characteristics

Diameter *(max)* 39.5 mm (1.56 in)

Height *(max; finish without radial tabs)* 50.3 mm (1.97 in)

Typical weight 96 g (3.39 oz)

Li metal content 2.6 g

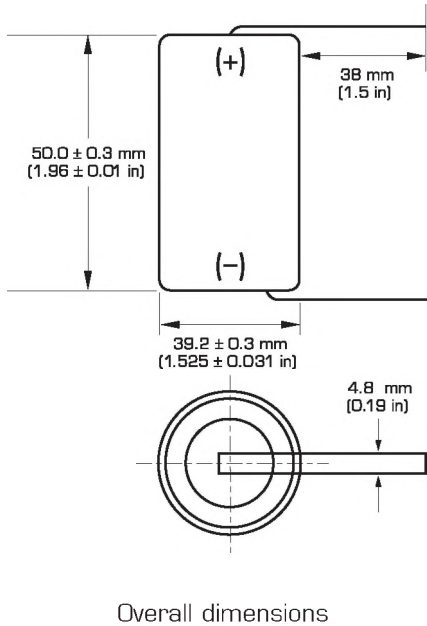
Standard cell comes with resin potting in the topshell area and two radial 0.15 mm - thick nickel tabs

Different configurations available on request.



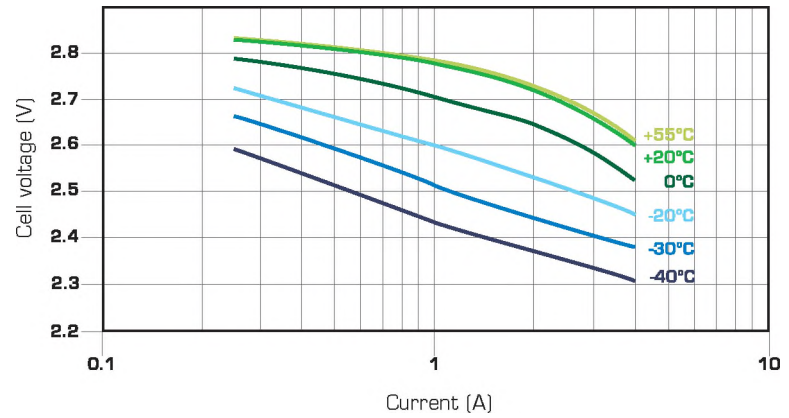
saft

LO 25 SX

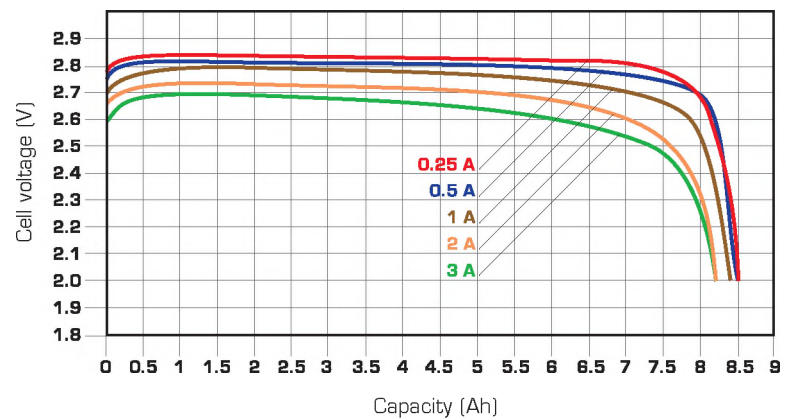


Handling precautions

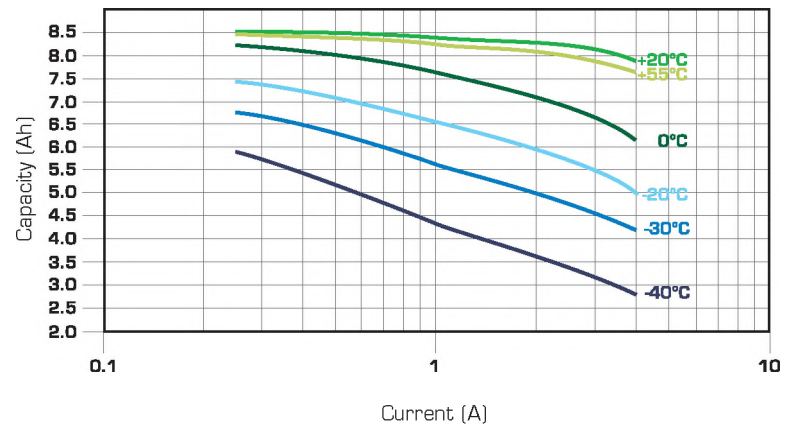
- Cell is pressurised.
- Do not puncture, open or mutilate.
- Do not obstruct the safety vent mechanism.
- Do not short circuit or charge.
- Do not expose to fire or temperatures above +70°C (+158°F).



Voltage at mid-discharge versus Current and Temperature (2.0 V cut off)



Typical discharge profiles at +20°C



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

Primary lithium batteries

LO 43 SHX

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

Very high drain and pulse capability

5/4 C-size spiral cell



Benefits

- High and stable discharge voltage
- Superior 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)
- Restricted for transport (class 9)
- UL Component Recognition
(File Number MH 15076)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in the USA

Main applications

- Radiocommunications and other military applications
- Beacons and Emergency Location Transmitters
- Sonobuoys
- Emergency car door opening system

Cell size references

5/4 R14 – 5/4 C

Electrical characteristics

(typical values for cells stored for one year or less)

Nominal capacity 5.0 Ah

(at 0.2 A +20°C 2.0 V cut-off. The capacity restored by the cell varies according to current drain, temperature and cut-off)

Open circuit voltage (at +20°C) 3.0 V

Nominal voltage (at 0.6 A +21°C/+70°F) 2.8 V

Maximum recommended continuous current 2.5 A
(to avoid over-heating. Higher currents possible, consult Saft)

Pulse capability : Typically up to 10 A
(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)

Storage (recommended) +30°C (+86°F) max
(possible without leakage) -60°C/+85°C
(-76°F/+185°F)

Operating temperature range -60°C/+70°C
(-76°F/+158°F)

(Short excursions up to +85°C possible at currents below 1 A)

Physical characteristics

Diameter (max) 26.0 mm (1.02 in)

Height (max; finish with radial tabs) 59.2 mm (2.33 in)

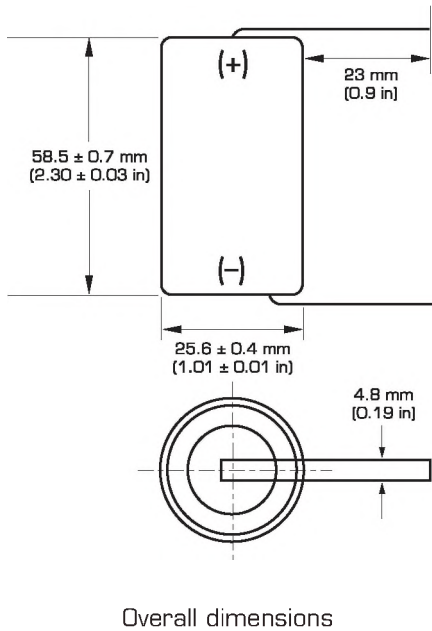
Typical weight 53 g [1.86 oz]

Li metal content 1.7 g

Standard cell comes with resin potting at the positive end and two radial 0.15 mm - thick nickel tabs

Other finish configurations available on request.

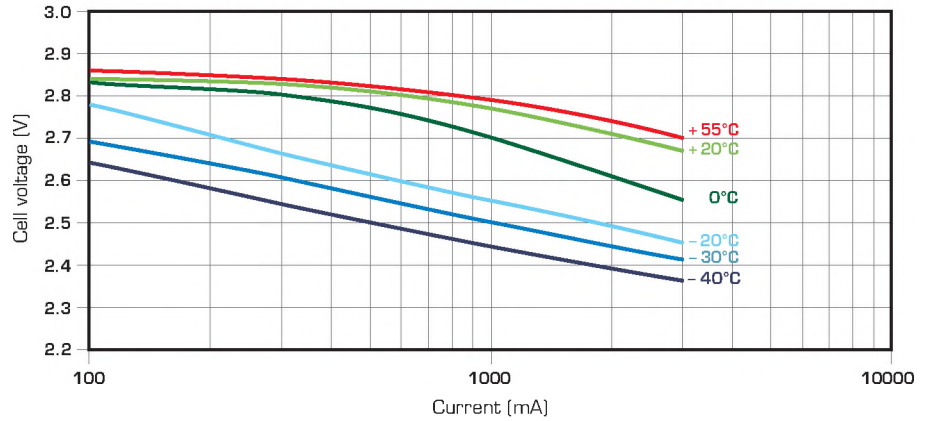
LO 43 SHX



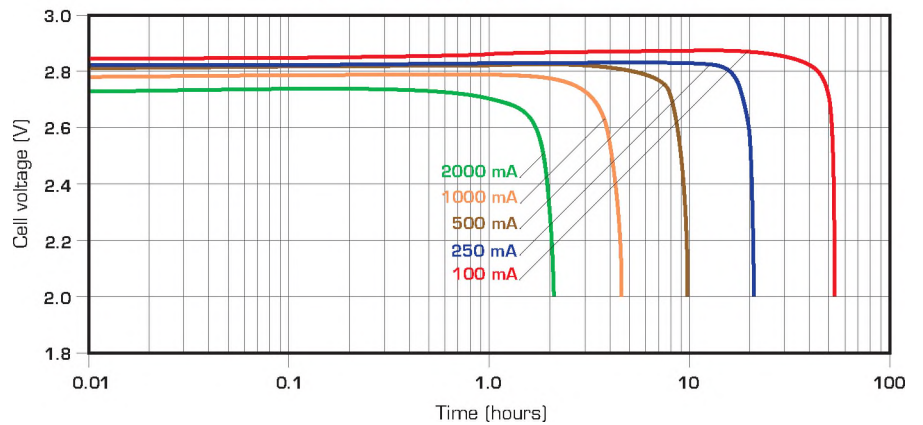
Handling precautions

- 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).

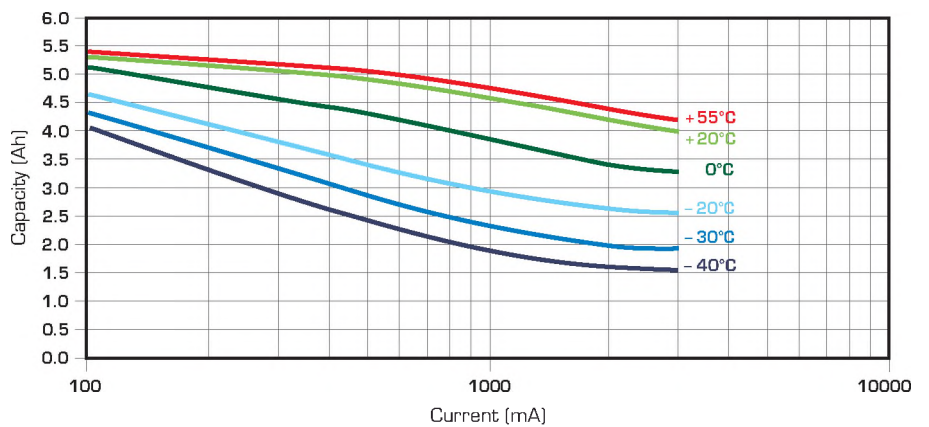
Voltage plateau versus Current and Temperature



Typical discharge profiles at +20°C



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



Primary lithium battery

LO 40 SX

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

High drain capability

$\frac{2}{3}$ "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

Cell size reference

$\frac{2}{3}$ "Thin" D

Electrical characteristics

(typical values for cells stored for one year or less)

Nominal capacity 3.50 Ah

(under 120 mA +20°C 2.0 V cut-off. The capacity restored by the cell varies according to current drain, temperature and cut-off)

Open circuit voltage (at +20°C) 3.0 V

Nominal voltage (at 120 mA +20°C) 2.8 V

Maximum recommended continuous current 2.0 A

(to avoid over-heating. Higher currents possible, consult Saft)

Pulse capability: Typically up to 5 A.

(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)

Storage (recommended) +30°C (+86°F) max.
(possible without leakage) -60°C/+85°C
[-76°F/+185°F]

Operating temperature range -60°C/+70°C
[-76°F/+158°F]

(Short excursions up to +85°C possible at currents below 1 A)

Physical characteristics

Diameter (max) 28.95 mm (1.140 in)

Height (max; finish without radial tabs) 42.29 mm (1.665 in)

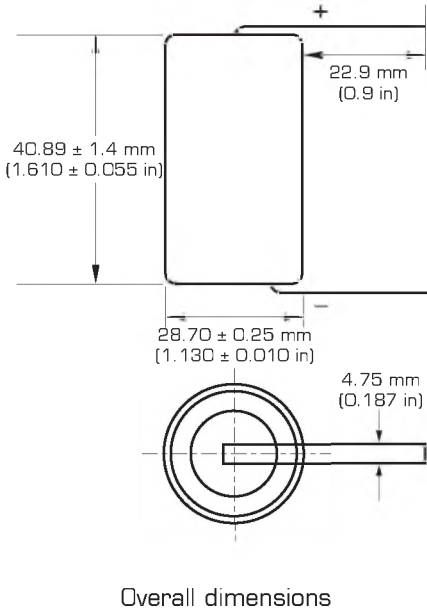
Typical weight 40 g (1.41 oz)

Li metal content 1.2 g

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

Other configurations available on request.

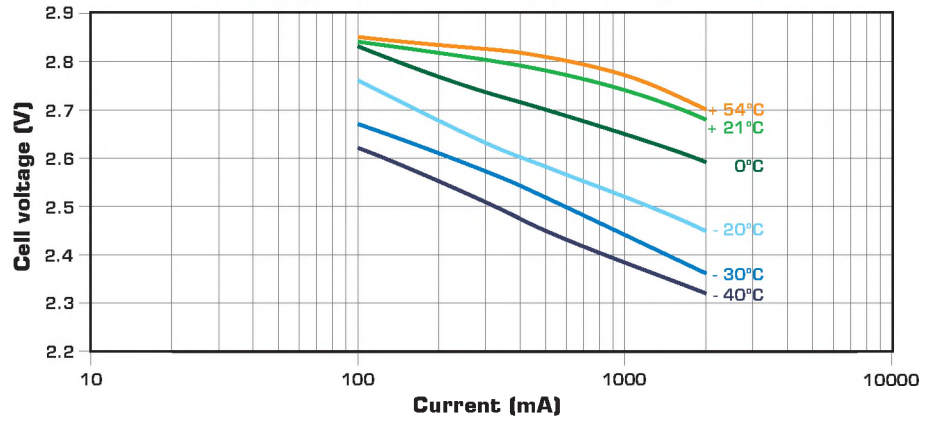
LO 40 SX



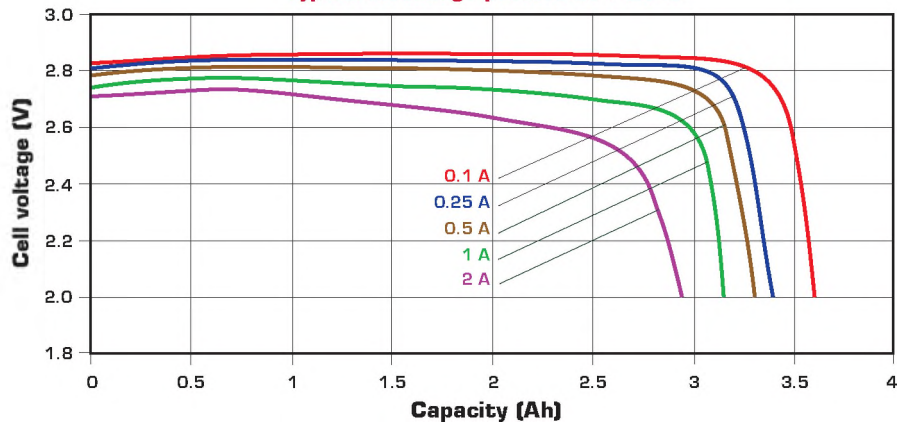
Handling precautions

- 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).

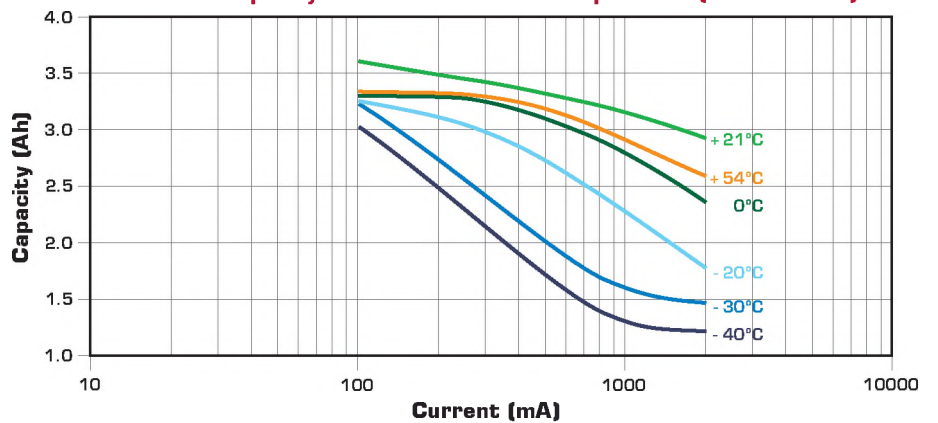
Voltage plateau versus Current and Temperature



Typical discharge profiles at +20°C



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



Primary lithium battery

LO 39 SHX

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

Very high drain and pulse capability

F-size spiral cell



Benefits

- High and stable discharge voltage
- Superior 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)
- Restricted for transport (class 9)
- UL Component Recognition
(File Number MH 15076)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in the USA

Main applications

- Radiocommunications and other military applications
- Beacons and Emergency Location Transmitters
- Sonobuoys
- Emergency car door opening system

Cell size references

F

Electrical characteristics

(typical values for cells stored for one year or less)

Nominal capacity		11.5 Ah
<i>(at 1 A +20°C 2.0 V cut-off. The capacity restored by the cell varies according to current drain, temperature and cut-off)</i>		
Nominal energy		32.2 Wh
Open circuit voltage	(at +20°C)	3.0 V
Nominal voltage	(at 0.6 A +21°C/+70°F)	2.8 V
Maximum recommended continuous current		3.0 A
<i>(to avoid over-heating. Higher currents possible, consult Saft)</i>		
Pulse capability : Typically up to 60 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	(recommended) (possible without leakage)	+30°C (+86°F) max -60°C/+85°C (-76°F/+185°F)
Operating temperature range		
		-60°C/+70°C (-76°F/+158°F)

(Short excursions up to +85°C possible at currents below 1 A)

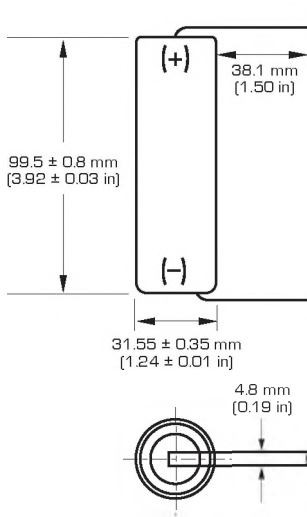
Physical characteristics

Diameter (max)	31.9 mm (1.25 in)
Height (max; finish with radial tabs)	100.3 mm (3.95 in)
Typical weight	125 g (4.4 oz)
Li metal content	3.9 g

Standard cell comes with resin potting at the positive end and two radial 0.15 mm - thick nickel tabs

Other finish configurations available on request.

LO 39 SHX

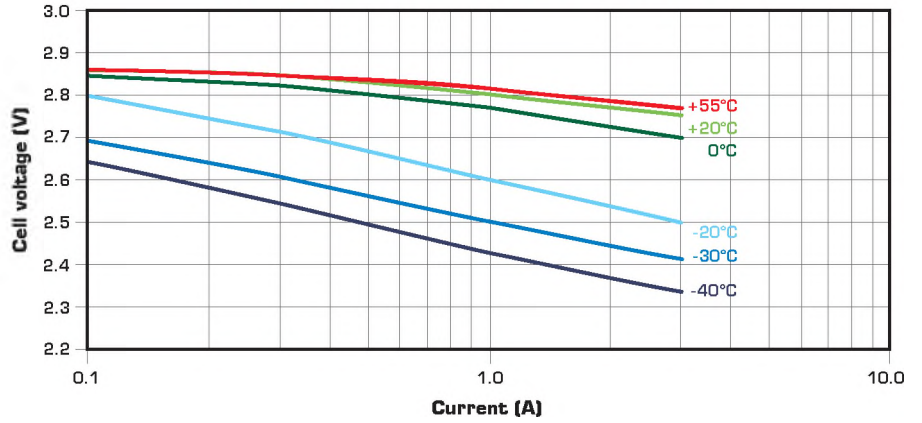


Overall dimensions

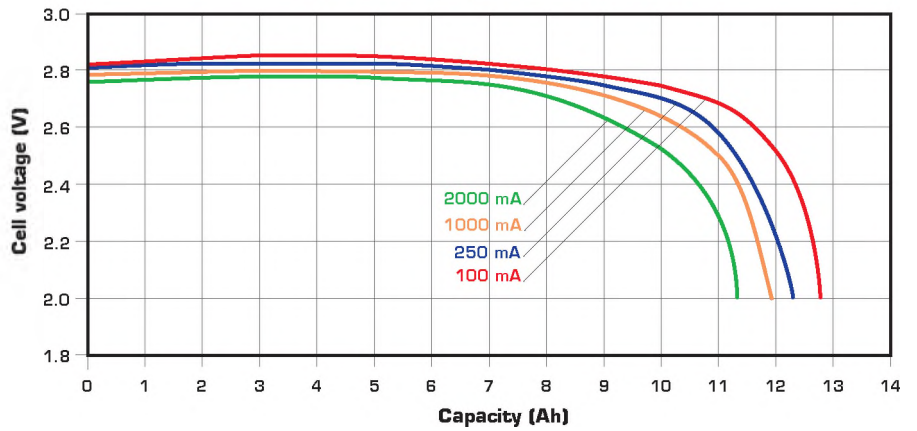
Handling precautions

- 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).

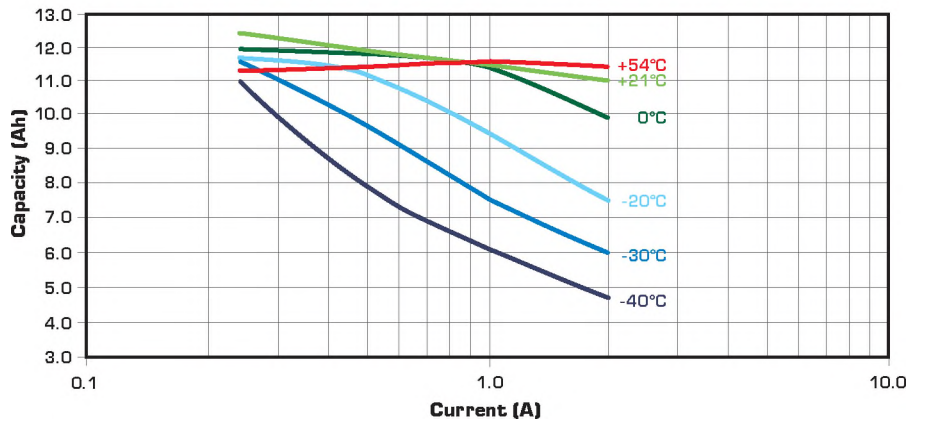
Voltage plateau versus Current and Temperature



Typical discharge profiles at +20°C



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



Primary lithium battery

LO 35 SX

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

High drain capability

²/₃ 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

Main applications

- Radiocommunications and other military applications
- Automotive telematics

Cell size reference

²/₃ C

Electrical characteristics

(typical values for cells stored for one year or less)

Nominal capacity 2.20 Ah

(under 650 mA + 20°C 2.0 V cut-off. The capacity restored by the cell varies according to current drain, temperature and cut-off)

Open circuit voltage (at + 20°C) 3.0 V

Nominal voltage (at 250 mA + 20°C) 2.8 V

Maximum recommended continuous current 2.0 A

(to avoid over-heating. Higher currents possible, consult Saft)

Pulse capability : Typically up to 5 A

(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)

Storage (recommended) + 30°C (+ 86°F) max.
(possible without leakage) - 60°C/+ 85°C
[- 76°F/+ 185°F]

Operating temperature range - 60°C/+ 70°C
[- 76°F/+ 158°F]

(Short excursions up to + 85°C possible at currents below 1 A)

Physical characteristics

Diameter (max) 25.9 mm (1.020 in)

Height (max; finish without radial tabs) 35.9 mm (1.413 in)

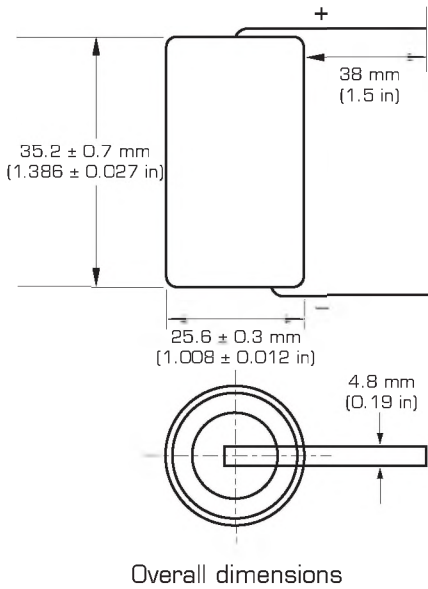
Typical weight 30 g (1.06 oz)

Li metal content 0.8 g

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

Other configurations available on request.

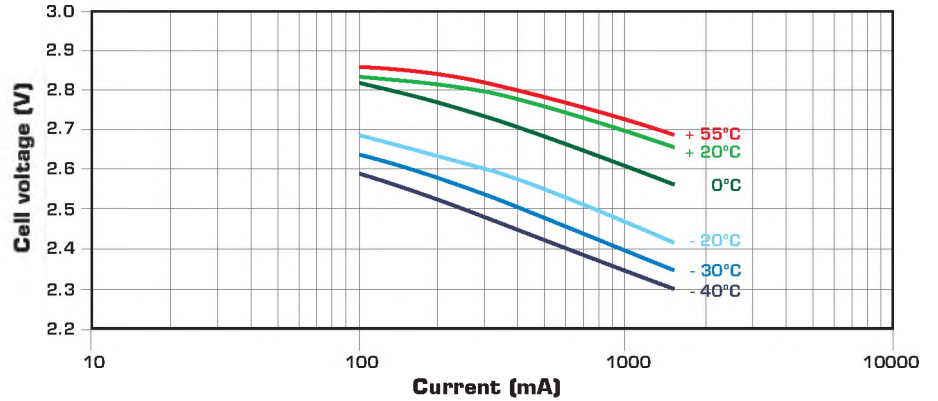
LO 35 SX



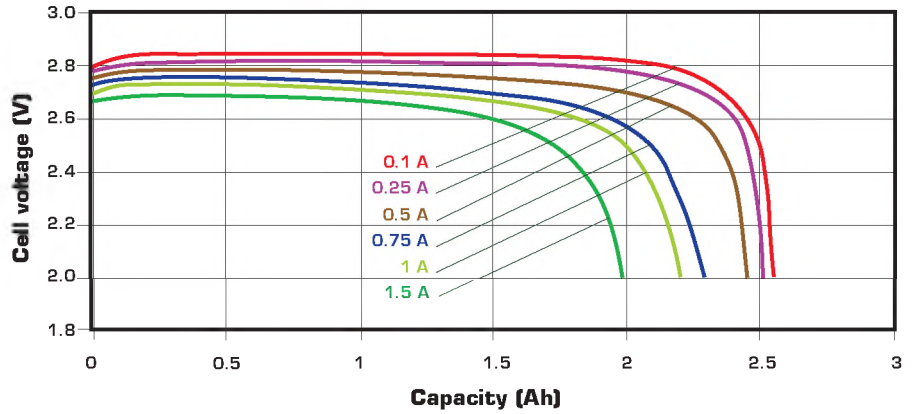
Handling precautions

- 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 $+70^{\circ}\text{C}$ ($+158^{\circ}\text{F}$).

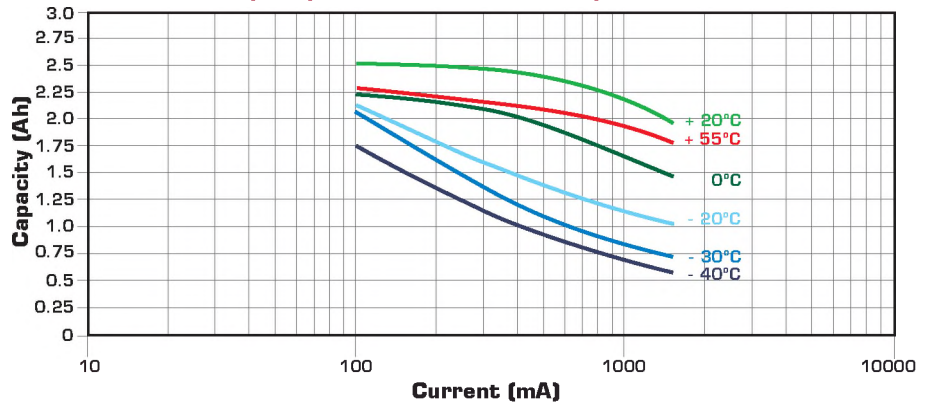
Voltage plateau versus Current and Temperature



Typical discharge profiles at + 20°C



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



Primary lithium battery

G 52/3

3.0 V Primary lithium-sulfur dioxide (Li-SO₂)
 High drain capability
 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

Key features

- Low self-discharge rate
(less than 2 % after 1 year of storage at +20°C)
- Hermetic glass-to-metal sealing
- Built-in safety vent
(at the negative end of the cell)
- Restricted for transport *(class 9)*
- Meets shock, vibration and other environmental requirements of military specifications
- Made in UK

Main applications

- Radiocommunications and other military applications
- Sonobuoys
- Life jacket lights
- Professional electronics
- Rescue devices

Cell size reference

R14 - C

Electrical characteristics

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

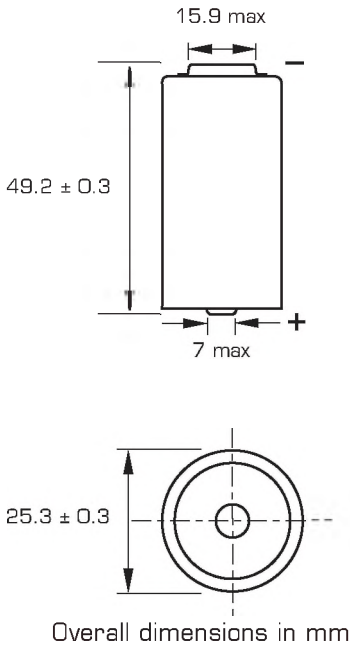
Nominal capacity <i>(at 1.0 A +20°C 2.0 V cut-off. The capacity restored by the cell varies according to current drain, temperature and cut-off)</i>	3.2 Ah
Open circuit voltage (at +20°C)	3.0 V
Nominal voltage (at 0.5 A +20°C)	2.8 V
Nominal energy	8.96 Wh
Maximum recommended continuous current <i>(to avoid over-heating)</i>	2.5 A
Pulse capability: Typically up to 5 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 (recommended) (possible without leakage)	+30°C (+86°F) max +85°C (+185°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/+70°C (-76°F/+158°F)

Physical characteristics

Diameter (max)	25.6 mm (1.01 in)
Height (max)	49.5 mm (1.95 in)
Typical weight	47 g (1.6 oz)
Li metal content	1.2 g

Standard cell comes with protruding positive end-cap.
 Finish with tabs available on request.

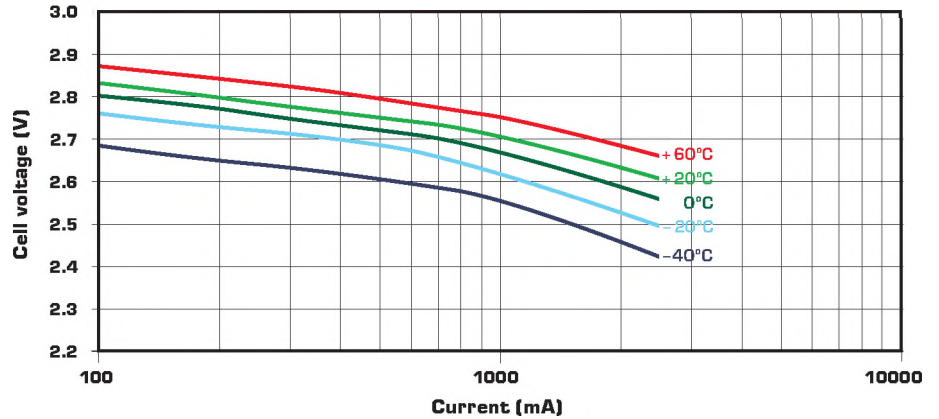
G 52/3



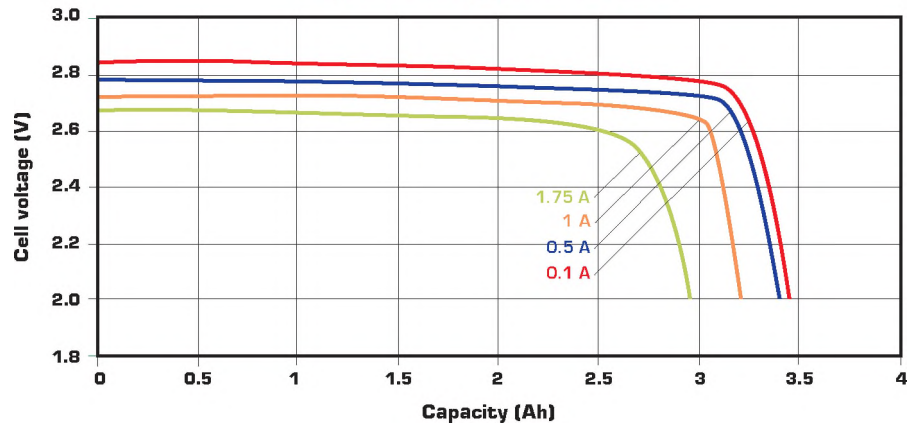
Handling precautions

- Cell is pressurised.
- 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).

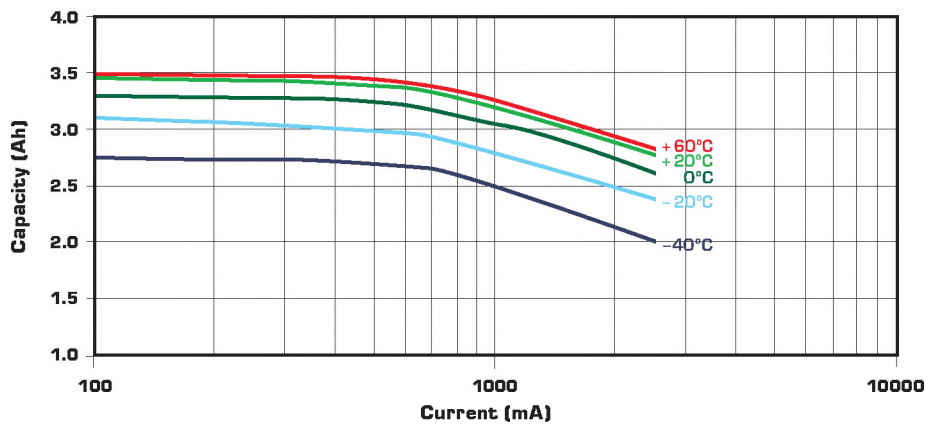
Voltage at mid-discharge versus Current and Temperature (2.0 V cut-off)



Typical discharge profiles at +20°C



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



Primary lithium batteries

G 36/2

3.0 V Primary lithium-sulfur dioxide (Li-SO₂)
 High drain capability
 “Long A”-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)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in UK

Main applications

- Radiocommunications and other military applications
- Memory back-up
- Life jacket lights
- Professional electronics

Cell size reference

“Long A”

Electrical characteristics

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

Nominal capacity 1.70 Ah
(at 0.08 A +20°C 2.0 V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off)

Open circuit voltage (at +20°C) 3.0 V

Nominal voltage (at 0.1 A +20°C) 2.8 V

Continuous current permitting 50% of the nominal capacity to be achieved at +20°C with 2.0 V cut off. 1.5 A

Pulse capability : Typically up to 2.5 A.
(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)

Storage *(recommended possible without leakage)* +30°C (+86°F) max
 +85°C (+185°F) max

Operating temperature range -60°C/+70°C
(Operation above ambient T may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult Saft)
 (-76°F/+158°F)

Physical characteristics

Diameter *(max)* 16.3 mm (0.64 in)

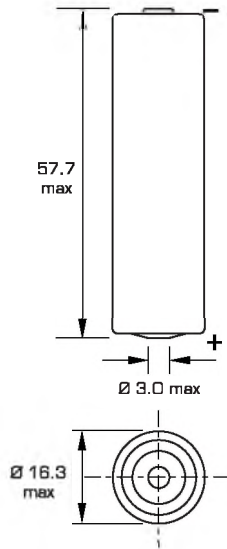
Height *(max)* 57.7 mm (2.27 in)

Typical weight 18 g (0.64 oz)

Li metal content 0.53 g

Standard cell comes with protruding positive end-cap.
 Finish with tabs available on request.

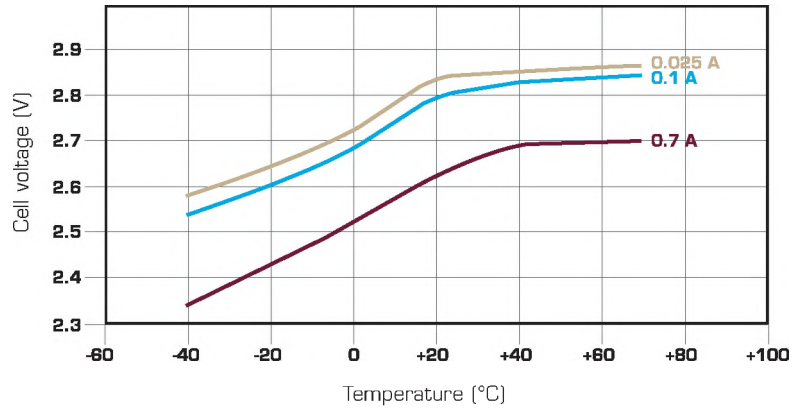
G 36/2



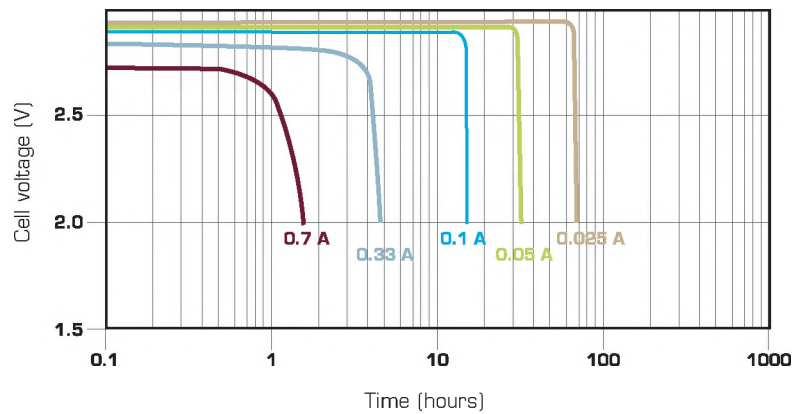
Overall dimensions in mm

Handling precautions

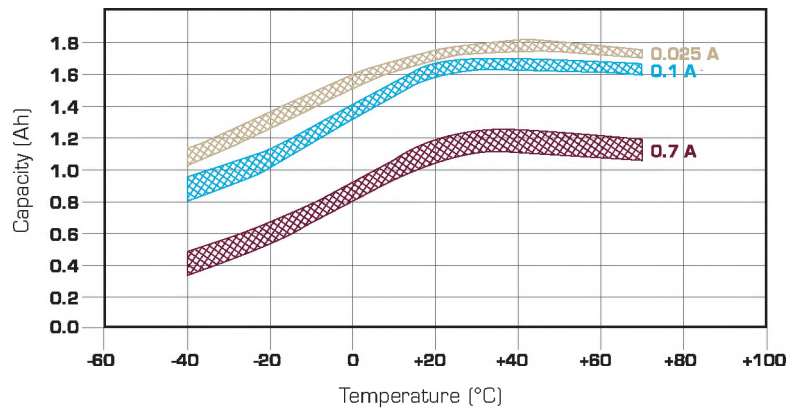
- Cell is pressurised.
- Do not puncture, open or mutilate.
- Do not obstruct the safety vent mechanism.
- Do not short circuit or charge.
- Do not expose to fire or temperatures above +70°C (+158°F).



Voltage at mid-discharge versus Current and Temperature (2.0 V cut-off)



Typical discharge profiles at +20°C



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

Primary lithium batteries

G 26

3.0 V Primary lithium-sulfur dioxide (Li-SO₂)
 High drain capability
 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)
- Restricted for transport *(class 9)*
- Meets shock, vibration and other environmental requirements of military specifications
- Made in UK

Main applications

- Radiocommunications and other military applications
- Beacons and Emergency Location Transmitters
- Sonobuoys
- Life jacket lights
- Professional electronics
- Missiles

Cell size reference

R20 - D

Electrical characteristics

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

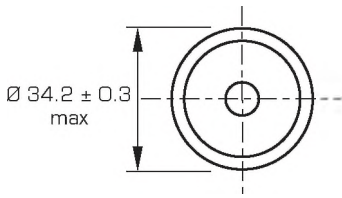
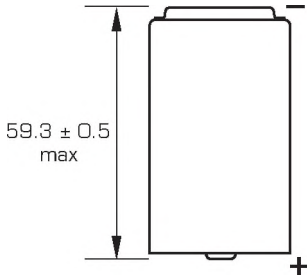
Nominal capacity <i>(at 0.25 A +20°C 2.0 V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off).</i>	7.75 Ah
Open circuit voltage (at +20°C)	3.0 V
Nominal voltage (at 0.5 A +20°C)	2.8 V
Maximum recommended continuous current <i>(to avoid over-heating)</i>	2.5 A
Pulse capability: Typically up to 5 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 <i>(recommended)</i> <i>(possible without leakage)</i>	+30°C (+86°F) max +85°C (+185°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/+70°C (-76°F/+158°F)

Physical characteristics

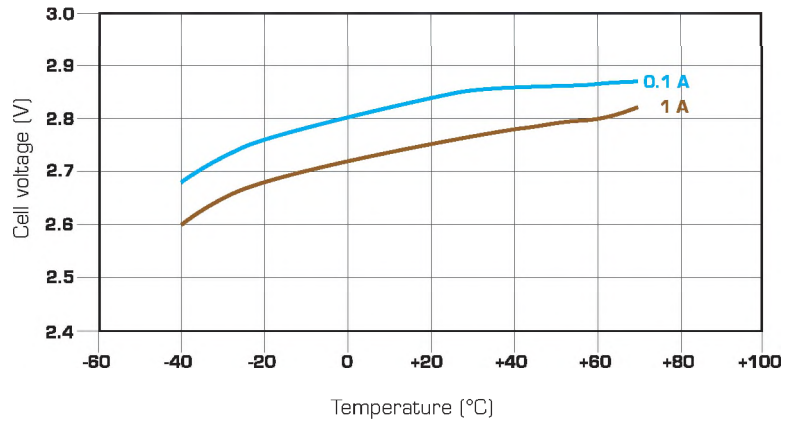
Diameter <i>(max)</i>	34.5 mm (1.36 in)
Height <i>(max)</i>	59.8 mm (2.35 in)
Typical weight	85 g (3 oz)
Li metal content	2.4 g

Standard cell comes with protruding positive end-cap.
 Finish with tabs available on request.

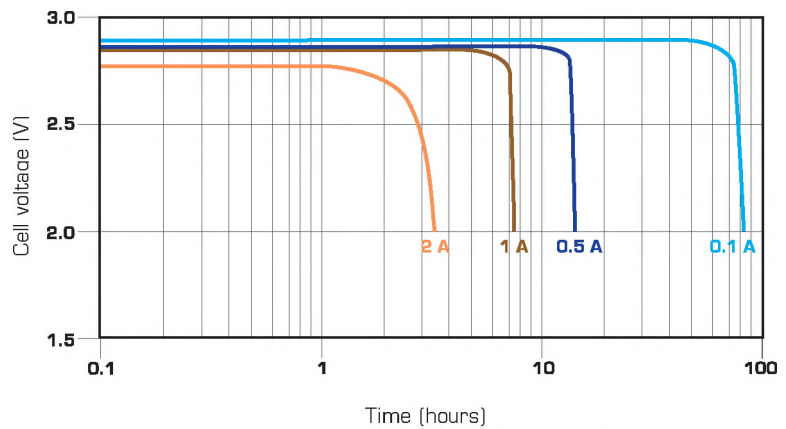
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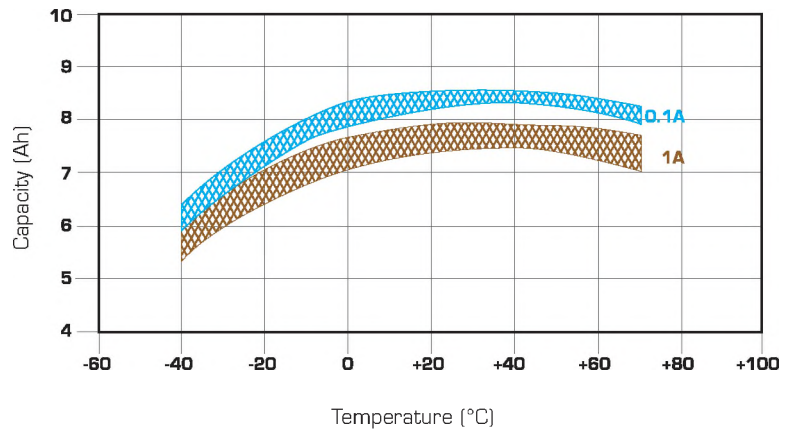
Overall dimensions in mm



Voltage at mid-discharge versus Current and Temperature (2.0 V cut-off)



Typical discharge profiles at +20°C



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

Handling precautions

- Cell is pressurised.
- 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).