Rechargeable lithium-ion battery
7s2p MP 176065 BLF

Extreme performance

The battery consists of the assembly of two parallel branches of seven MP 176065 Saft lithium-ion cells in series (7s2p configuration) and connected by a specifically designed electronic protection circuit.

Benefits

- Extended autonomy and life for mobile systems
- Wide operating temperature range
- Easy integration into compact and light systems
- Several batteries can be connected in parallel to make very large batteries *(Consult Saft for details)*
- Unrivalled low temperature performance
- Maintenance-free
- Light weight

Key features

- Electronic protection against charger faults
- Very high energy density
- Excellent charge recovery after long storage, even at high temperature
- Long cycle life *(over 70 % initial capacity after 600 cycles 100 % DoD)*
- Made and designed in the EU
- Restricted for transport *(class 9)*

Main applications

- Large mobile power supplies
- Man-portable field radar
- Training simulator
- VLF/UHF radio base stations
- Remote sensors

Electrical characteristics

Nominal voltage (2.8 A rate at 20°C)	26.25 V
Typical capacity (under 2.8 A at 20°C 19 V cut-off)	14 Ah

Mechanical characteristics

Length max	137.8 mm
Width max	125 mm
Height max (including contacts)	81 mm
Typical weight	2200 g

Operating conditions

Charge method	Constant Current/Constant Voltage
Max. recommended charge current	7 A at 20°C
Charge temperature range*	- 20°C to + 60°C
Time at 20°C	5 hours under 7 A constant
Max. recommended continuous discharge current*	14 A at 20°C
Pulse discharge current (< 7 ms)	up to 50 A
Discharge cut-off voltage	19 V
Discharge temperature range	- 30°C to + 55°C

References

Electrical interface**	Modex connector type 5557 ref. 39-01-2065
Saft's Part Number	08001B

** Consult Saft for optimized charging below 0°C and at 60°C*
***Custom connectors available: consult Saft*

February 2008

7s2p MP 176065 BLF

Technology

- Graphite-based negative electrode
- Lithium Cobalt oxide-based positive electrode
- Electrolyte: organic solvents
- Built-in redundant safety protections
- Battery comprises two parallel branches of seven MP 176065 cells in series and features an electronic protection circuit

Built-in protection devices ensure safety in case of:

- Exposure to heat
- Exposure to direct sunlight for extended periods of time
- Short circuit
- Overcharge
- Overdischarge
- Shrapnel penetration

When handling Saft MP batteries:

- Do not disassemble
- Do not remove the protection circuit
- Do not incinerate

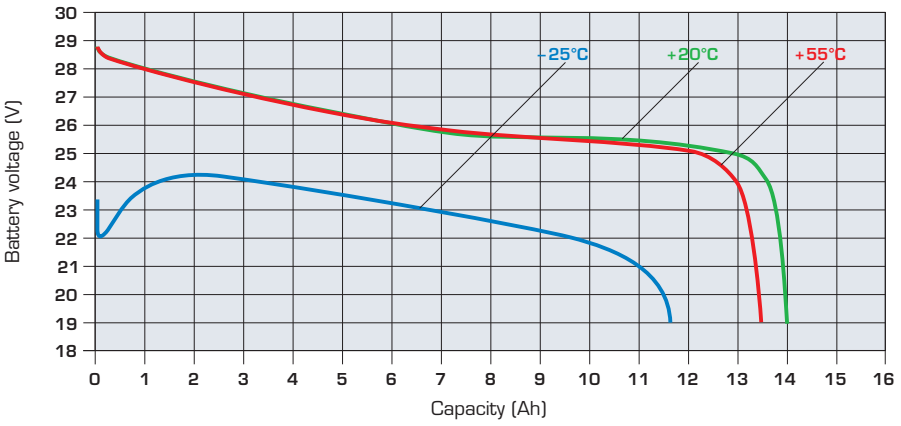
Transportation and storage

- Store in a dry place at a temperature preferably not exceeding 30°C
- For long-term storage, keep the battery within a (30 ± 15) % state of charge

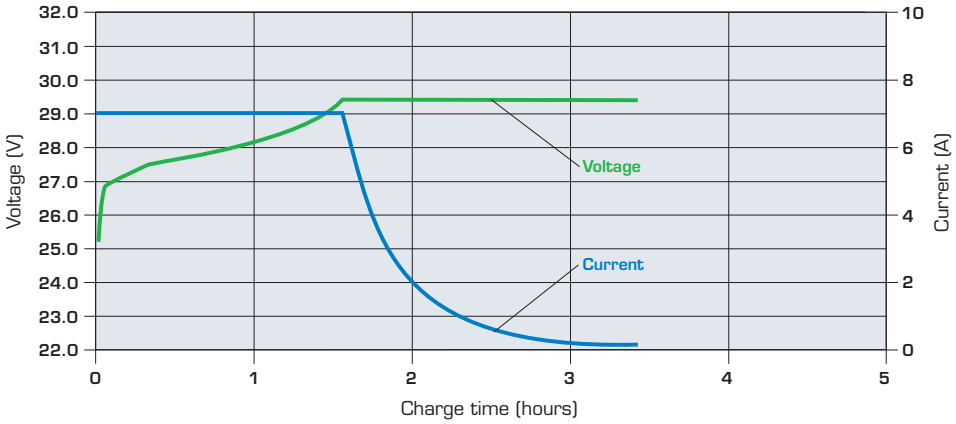
Protection circuit

- Protection against over voltage *(resettable)*
- Protection against under voltage *(resettable)*
- Protection against over current during discharge
- Equalising by deep discharge

Typical discharge profile (2.8 A - C/5 rate - charge 29.4 V)



Charge characteristics to 29.4 V under 7 A (C/2) at +20°C



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 41 11
Fax: +1 (828) 879 39 81

www.saftbatteries.com

Doc. N° 54063-2-0208

Published by the Communications Department.

Photo credit: Saft.

Société anonyme au capital de 31 944 000 €
RCS Bobigny B 383 703 873

Produced by Arthur Associates Limited.