

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
(385 Wh/l and 180 Wh/kg)
- 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)	25.20 V
Typical capacity (under 2.8 A at 20°C 19 V cut-off)	12.2 Ah

Mechanical characteristics

Length max	130 mm
Width max	122 mm
Height max (including contacts)	81 mm
Typical weight	2500 g

Operating conditions

Charge method	Constant Current/Constant Voltage
Max. recommended charge current	10.0 A at 20°C
Charge voltage	28.70 V ($\pm 1\%$)
Charge temperature range*	- 20°C to +60°C
Time at 20°C	5 hours under 6.1 A constant
Max. recommended continuous discharge current	13 A at 20°C
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

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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

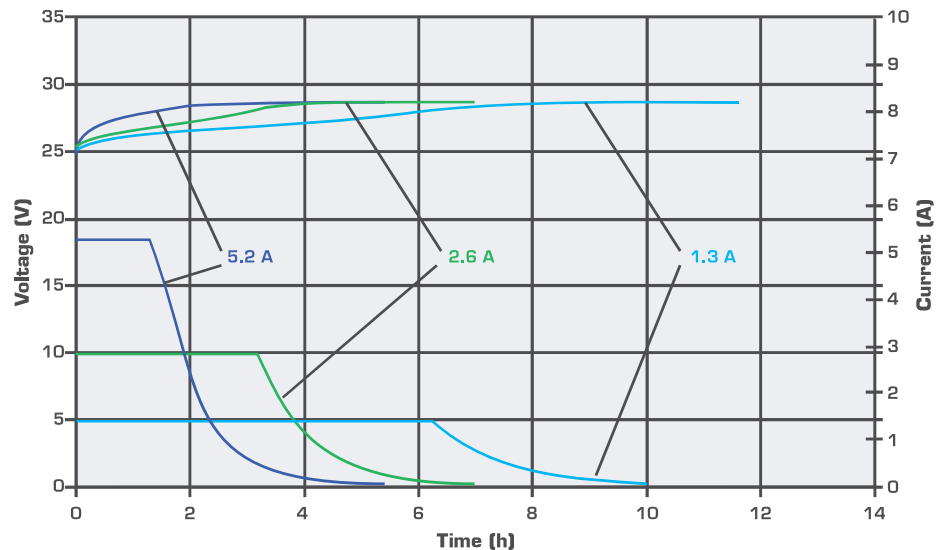
Transportation and storage

- 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

Charge characteristics to 28.7 V at +20°C



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