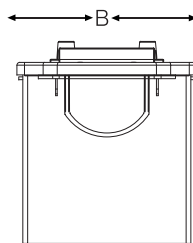
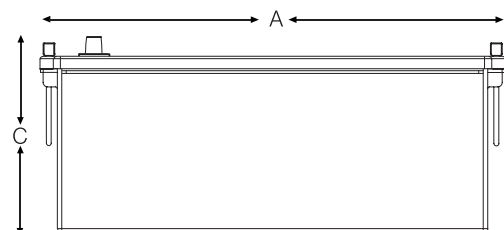
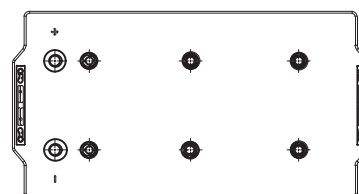


G06-12-170-3

Semi-Traction Bloc Battery



Positive



Negative

Electrical Specifications

Voltage	12V
80% DOD Voltage Cutoff	11.2V
Self Discharge	Less than 3% per month (20°C/68°F)
Charge Temperature	Min: -10°C (14°F) / Max: 50°C (122°F)
Discharge Temperature**	Min: -40°C (-40°F) / Max: 50°C (122°F)
Storage	Min: -20°C (-4°F) / Max: 60°C (140°F)

Amp Hours (AH)			
20 HR	10 HR	5 HR	3 HR
200	195	170	164

** CAUTION: Depths of discharge, operating voltages and currents, when designing systems for use at maximum temperatures, will vary.

Mechanical Specifications

Industry Reference	DIN C	
Length (A)	20.4 in	518 mm
Width (B)	10.8 in	274 mm
Height (C)	9.4 in	238 mm
Weight	150 lb	68 kg
Terminal (Opt'l)*	A-Pole (Industrial Terminal optional)	
Cell(s)	6	
Electrolyte	Gel	
Terminal Torque Nm	n/a	

NOTE: There is a tolerance of +/-2%.

Features

Maintenance-free bloc batteries in Gel technology (no topping up during lifetime)

Good high current performance for extreme operating conditions

High-class patented safety valve

700 cycles (DIN EN 60254-1) (IEC 254-1)

Valve-regulated lead-acid battery

Recyclable

Long cycle life

Low self discharge rate allows for up to 2 years shelf life

Classified as a non-spillable battery is not restricted for transportation by:

- Air (IATA/ICAO provision 67)
- Ground (STB, DOT-CFR-HMR49)
- Water (IMDG amendment 27)

Applications

Electric vehicles

Wheelchairs

Cleaning machines

Electric working platforms

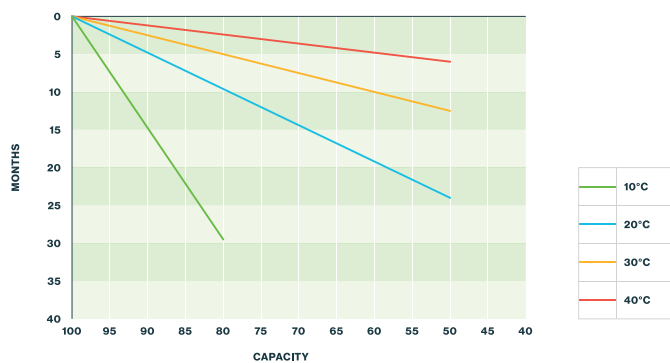
Universal for multiple cyclic applications

Charging profile

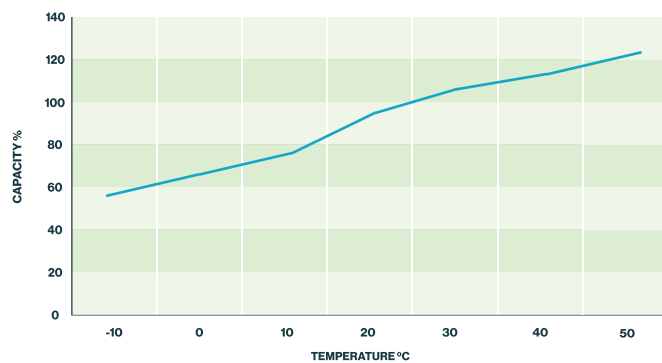
IU Charging $I = \text{min. } 12\% C_5 \text{ max. } 18\% C_5$
 $U = 2.4 \text{ V per cell}$

IUI Charging $I_1 = \text{min. } 12\% C_5 \text{ max. } 18\% C_5$
 $U = 2.35 \text{ V per cell}$
 $I_2 = 1.5\% C_5 \text{ for max. 4 hours}$

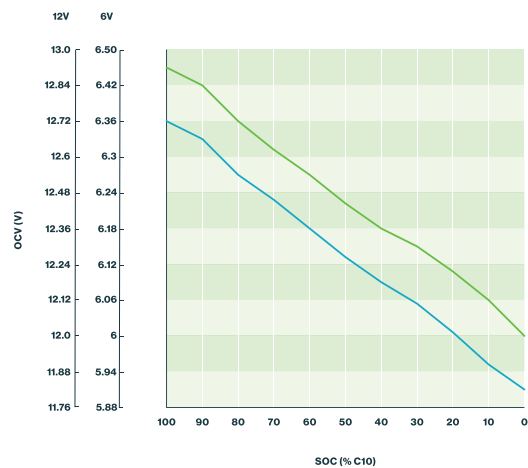
Self discharge at different temperatures



Capacity vs. temperature

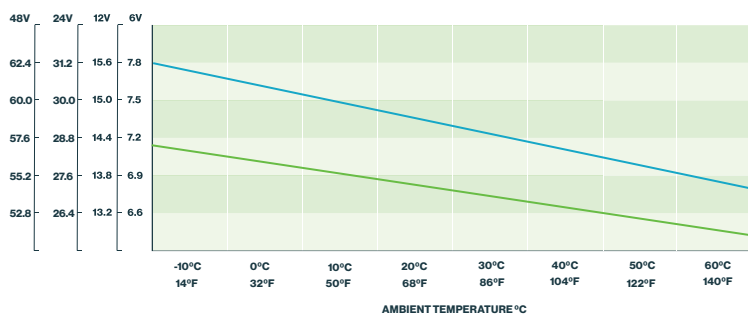


Storage: Determine the state of charge



OCV max
OCV min

Relation between charging, voltage and temperature



STANDBY USE
CYCLE USE