NANOGEL

DATASHEET

NG-L16 / 6V

MOTIVE POWER LEAD-ACID GEL BATTERY

Advanced nanotechnology enhances current acceptance, extends cycle life, supports partial state of charge operation, and enables fast charging potential.

- High Charge Efficiency
- Carbon Reinforced
- Outperforms AGM
- Low Cost of Ownership
- High Cycling Ability
- No Electrolyte Starvation
- No Acid Stratification

FEATURES

Maintenance-free fumed silica GEL technology with microporous separators

Lead crystal and long chain additives to ensure consistent capacity and performance

Reinforced active material

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

High-class patented safety valve

Low resistance / high current acceptance

99% recyclable

Low self discharge rate of <3%/month

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)

Compliant with EN60254-1&2 & IEC254-1/2, ISO 7176-25 & SAE J 1495

APPLICATIONS

Electric vehicles

Aerial work platforms

Cleaning machines

Mobility devices

Universal for cyclic use applications

SPECIFICATIONS

ELECTRICAL

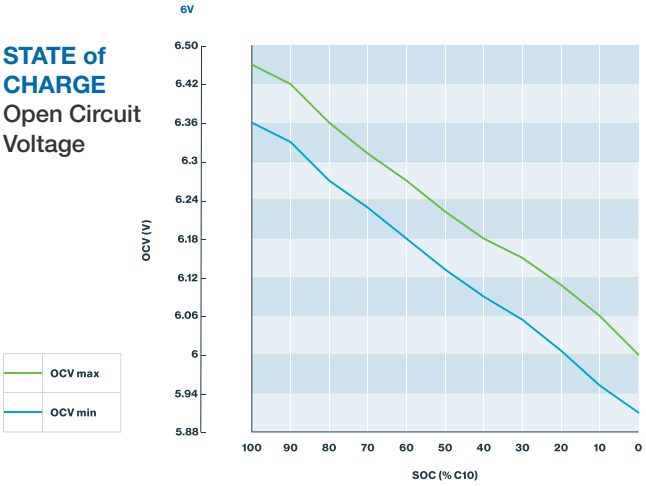
Voltage	6V			
Rated Capacity @ 25°C	330Ah C_{20}	311Ah C_{10}	290Ah C_5	262Ah C_3
	to 1.75vpc	to 1.75vpc	to 1.70vpc	to 1.70vpc
Reserve Capacity @ 25°C	750 minutes to 1.75vpc (25A load)			

Initial capacity: ~ 90%
Capacity after ~ 30 cycles: 100%
Capacity development: ~ 110-115%

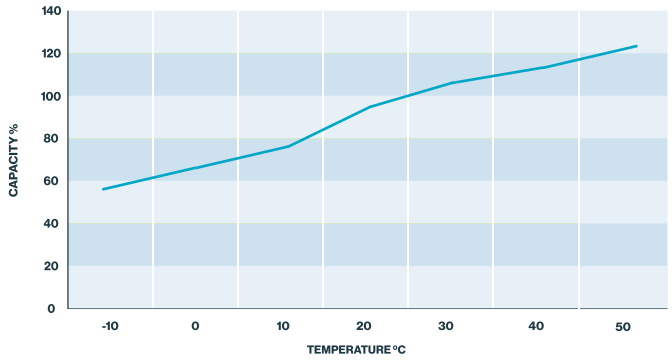
ENVIRONMENTAL

Self Discharge	Less than 3% per month {20°C/68°F)
Charge Temperature	Min: -10°C (14°F) / Max: 50°C (122°F)
Below 15°C or above 35°C, a temperature compensated charger must be used	
Discharge Temperature**	Min:-40°C (-40°F) I Max: 50°C (122°F)
Storage	Min:-20°C (-4° F) / Max: 60°C (140°F)
After 24 months at 20°C a fully charged battery will lose 50% capacity	

STATE of CHARGE
Open Circuit Voltage



CAPACITY vs TEMPERATURE

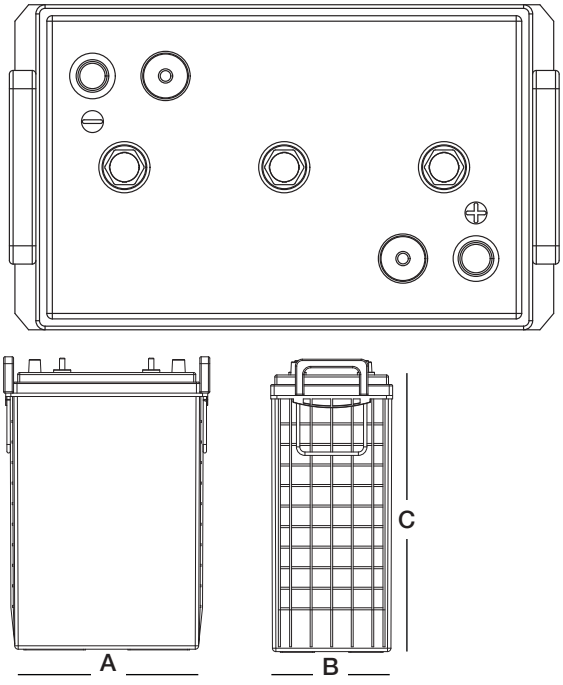


Specifications subject to change without notice.

MECHANICAL

Industry Reference		BCI L16	
Length (A)	11.9 in		302 mm
Width (B)	7.0 in		178 mm
Height (C)	15.9 in		405 mm
Terminal Height	0.8 in		20 mm
Weight	118 lbs		53.4 kgs
Dual Terminal			
Auto (-/+) Stud (-) Stud (+)	Std 5/16 in 3/8 in		Std 8 mm 9.5 mm
Torque Nm / in-lb (Auto) Torque Nm / in-lb (Stud)		8/71 16/142	

Tolerance of +/-2%



CHARGING REQUIREMENTS

Recommended: IUU - 12-18% C5 to 2.40vpc
IUI -16-18% C5 to 2.35vpc

Maximum bulk charge rate is $0.3C_5$

Do not discharge or charge batteries in a non-ventilated compartment. Batteries can be installed vertically or horizontally. Do not invert. Continual overcharging or undercharging will damage the battery and shorten life. Ensure battery is charged to 100% at least once per week. Batteries used at temperatures above 25°C can result in reduced life. Additional details contained in Installation, Operation, and Maintenance Manual