

LDC series advanced lead carbon battery. Combine Nano-Carbon technology and VRLA technology. By enhancing the negative active material, and improves the charging efficiency and deep discharge recovery. The cycle life of the battery is extra-long and special in high rate (HR) and partial state of charge (PSOC) cycle. AEG Lead Carbon batteries are designed according to the latest Standard of Lead carbon battery, focuses on designing for electric energy storage, solar power station, hybrid system.



FEATURE

- Using Nano-carbon technology, improve the charge acceptance ability and large current discharge performance
- Specially formulated carbon additive for improving the morphology and structure of Negative Active Material, inhibit the failure of negative sulfation
- Extra-long cycle life
- Superior deep-cycle performance
- Patented nanometer level fumed silica gel electrolyte
- Strict quality control manufacturing processes, ISO9001 approve
- Valve regulated sealed Maintenance free
- Non-Hazardous for Transportation
- IEC, CE, RoHS, ISO9001, ISO14001
- Vertical installation design

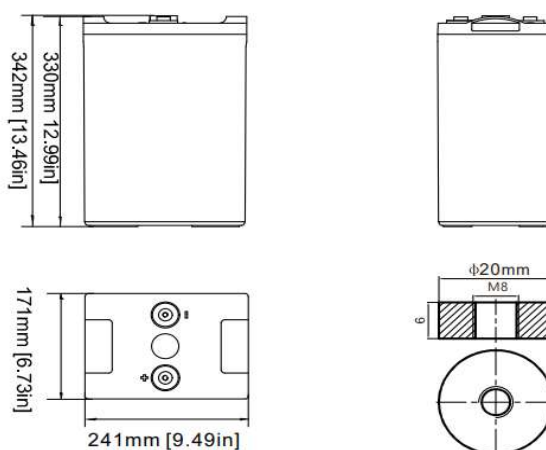


SPECIFICATION

Nominal Voltage	2V (2 cells)
Nominal Capacity	
10-Hr Rate to 1.8V @ 25°C	500Ah
Approximate Net Weight	35.5 kg (78.24 lbs) (±2%)
Max. Charging Current	0.5C ₁₀
Cycle Use Charging	2.35V @25°C(77°F)
Operating Temperature Range	-40°C to 60°C(-40°F~140°F)
Advice operating temperature	15°C~25°C(59°F~77°F)
Self Discharge	
1 month	97%
3 month	93%
6 month	87%
AEG LDC battery can be stored up to 6 months at 25°C and then a freshening charge is required. If the storage temperature higher than 25°C, a freshening recharge will be required sooner.	
Case and cover	A.B.S. UL94-V0 Optional.
Design Life time	20 years

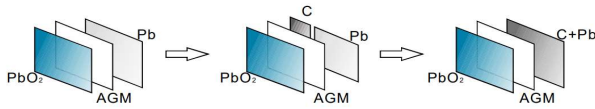


DIMENSIONS (mm)



Positive	Negative Plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Lead dioxide	Nano-Carbon Lead	ABS	ABS	Rubber	Copper	Superfine AGM	Fumed silica Gel

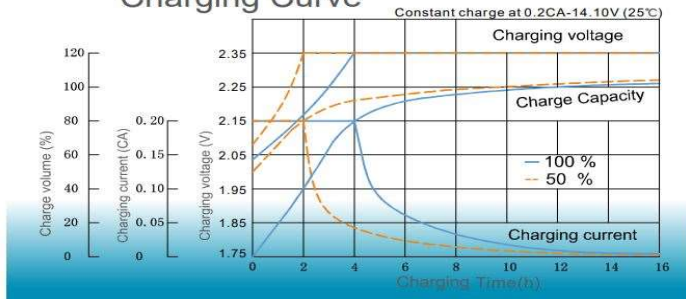
BATTERY CONSTRUCTION



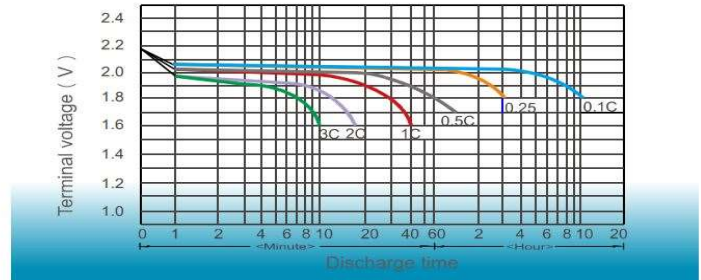
Super Long Life
Nano-Carbon
Deep Cycle



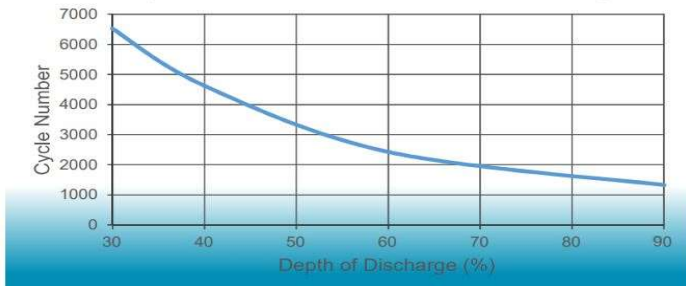
Charging Curve



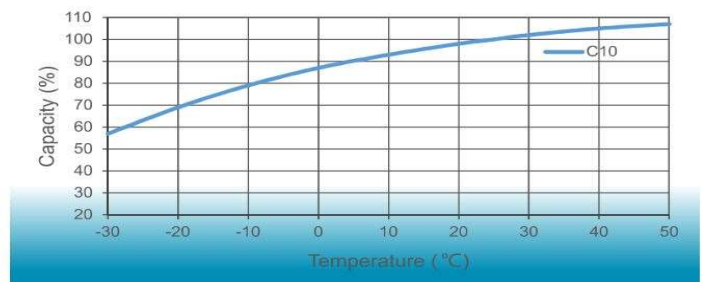
Discharge Curve (25 °C)



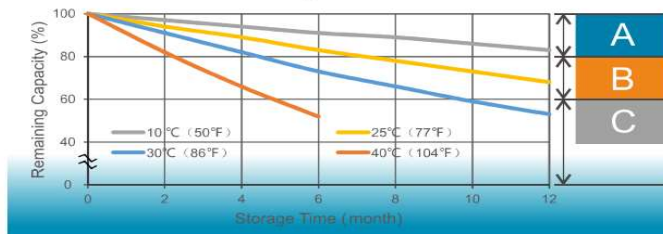
Cycle Life Vs Depth of Discharge



Temperature Vs Battery Capacity

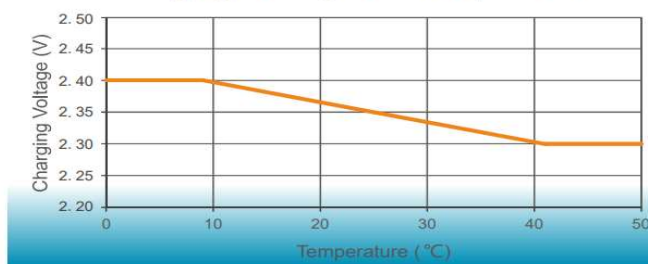


Self Discharge Characteristics



- A** Charging is not necessary unless 100% of capacity is required.
- B** Charging before use is necessary to help recover full capacity.
- C** Charging may fail to restore full capacity. Do not let batteries reach this state.

Charging Voltage Vs Temperature



Cycle Use: Apply constant voltage charge 2.35V at 25°C. Initial charging current should be set at less than 0.5C Amps. Switch to float charge to avoid overcharging.

Temperature Compensation: Charging Voltage for both Cyclic and Standby applications should be regulated in relation to ambient temperature. As temperature rises charging voltage should be reduced to prevent overcharge and increased as temperature falls to avoid undercharge. 3 mV/cell/°C.



APPLICATION

A whole range of CYCLIC applications including but not limited to:

- Solar/wind system
- ESS
- Power Station
- Smart-grid & micro-grid sites
- Peak shifting of electrical power system

