EV12-50

12V50Ah / 10hr rate



Introduction

Battery Picture & Terminal Layout

Genergy EV AGM Series is designed for tough applications and repeated deep discharging. It is superior with the long cycle life, large current discharge capability, high reliability and safety. The range is the definitive choice for golf cart, electric medical equipment, automated guided vehicles (AGV), aerial lifts, floor cleaning equipment, robotics applications.

Battery Features

- Extra long cycle life and resistance to mechanical stress and the elements all in one battery.
- Maintenance-free
- Very high purity lead (purity rate 99.994%)
- Traction heavy duty grid design gives consistent active material adhesion and corrosion resistance.
- Fully tank formed plates for evenly formed and capacity matched plates.
- Low impurity electrolyte
- Recognized gas recombination efficiency greater than 99.9%
- Flame arresting pressure regulated safety sealing valves for safety.
- Low self-discharge
- Classified as non-spillable and not restricted for
 - transportation by > Air (IATA/ICAO provision 67)
 - > Surface (DOT-CFR-HMR49)
 - > Water (per IMDG amendment 27)

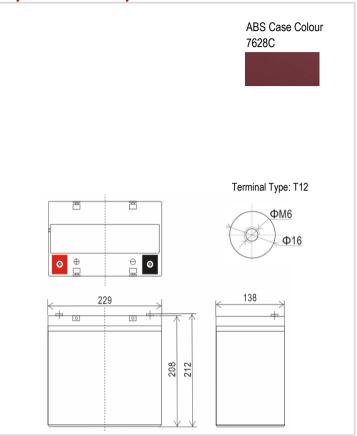
Electrical Specification

Design	450 Cycles						
Nomina	al Capacity	@ 25°C /77°F					
100	hour rate	0.6A to 1.75Vpc		60 Ah			
10	hour rate	5.0 A to 1.75Vpc		50 Ah			
5	hour rate	9.0 A to 1.75Vpc		45 Ah			
3	hour rate	13.3A to 1.70Vpc		40 Ah			
1	hour rate	30 A to 1.60Vpc		30 Ah			
Minutes of Discharge							
25A to	10.5V	. 92	56A to 10.2V	35			
75A to	10.2V	. 23	85A to 10.2V	19			
100A to10.2V 15							
Cranki	ng Amps						
0°C /32	2°F	. 260	-18°C /0°F	215			
Internal Resistance							
(Fully charged battery @ 25°C /77°F) 9.0m Ω							
Max. Discharge Current @ 25°C /77°F 450 A (5S							
Charge Methods: Constant voltage charge @ 25°C /77°F							
C	Cycle Use			14.7 ~ 14.9V			
Ν	lax. Currer	nt		12.5 A			
S	Standby Use	e		13.6 - 13.8V			
Operat	-20 ~ 60°C						
Notes: battery voltage must be adjusted according to temperature.							
Please refer to our recommendation.							

Self-Discharge

3% of capacity declined per month @ 25°C (77°F).

Subject to revision without notice. Please contact our sales representatives for latest version. Web: www.genergybattery.com | Email: sales@genergybattery.com



Dimension & Weight

	Weight			
Length	Width	Height	Total Height	(± 2%)
229 mm	138 mm	208 mm	212 mm	18.2 kg
9.0 inch	5.4 inch	8.2 inch	8.3 inch	40.1 lbs

Typical Applications

- Golf Cart
- Tour Bus
- Electric Medical Equipments
- O Aerial and Fork Lifts
- Golf Trolley
- Sweeper
- Floor Cleaning Machines
- O Marine and RV



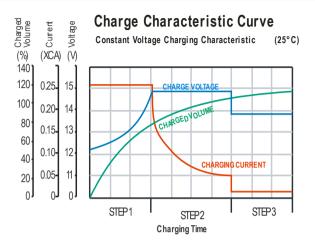




12V50Ah / 10hr rate



Graphs

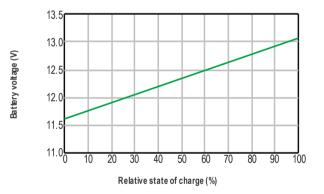


Depth of discharge %

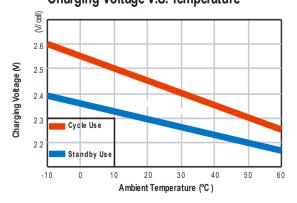
Cycle Service Life V.S. Depth Of Discharge

300 600 900 1200 1500 1800 Number of Cycles (cycles)

OCV V.S. State of Charge (20°C)



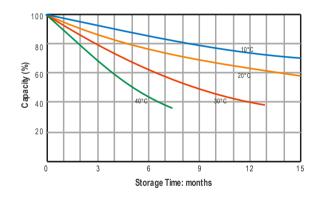
Charging Voltage V.S. Temperature



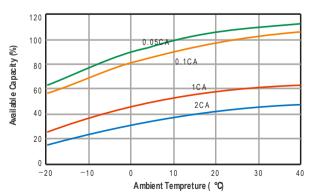
Self-Discharge Characteristic

20

0



Temperature Effects On Capacity



Subject to revision without notice. Please contact our sales representatives for latest version.
Web: www.genergybattery.com | Email: sales@genergybattery.com