

# **Deep Cycle Flooded Batteries**



Century Deep Cycle Flooded batteries are constructed using thicker plates, specialist antimonial lead alloys and denser active material, to withstand repeated recharge and discharge cycles. The maintainable design enables easy access and topping up of electrolyte levels for maximum control over battery life. Premium grade raw materials and electrolyte ensure reliable deep cycle performance in recreational and commercial applications.

#### **Product Specifications**

Voltage	12	Weight	Approx. 34 kg
Capacity	125Ah@20hr-rate	Terminal	Standard
Operating Temperature Range	25°C ± 5°C	Recommended Max. Charging – Current Limit	12.5A
Self Discharge	Century flooded batteries can be stored for more than 6 months at 25°C. Self-discharge rate less than 3% per month at 25°C. Please charge battery prior to long term storage and before using.	Equalisation and Cycle Service	14.4VDC/unit average at 25°C
Container Material	Polypropylene (PP)	Float Charging Voltage	13.2 to 13.5V
Positive Grid Material	Cast-lead Antimonial Alloy	Negative Grid Material	Cast-lead Antimonial Alloy
Separator Material	Polyethylene (PE) with Glass Mat		

89T (12V125Ah)

#### Unit: mm Dimension: 345 (L) x 175 (W) x 260 (H) x 285 (TH)







#### **Charging Procedure**

Correct charging is one of the most important factors when using deep cycle lead acid batteries. Following a discharge, the battery should be fully charged in a well ventilated area.

Charging at constant voltage is the most suitable method for charging a deep cycle battery. The Charging Curve example (below) shows the typical charging characteristic of a deep cycle battery that has been discharged to 80% depth of discharge, then charged with a constant voltage charger at 14.4V with the initial charging current controlled at 0.1CA.

The charging current is maintained at this level until the battery voltage reaches 14.4V. At this point, the constant voltage phase starts and charging current gradually drops. The charging process is terminated when the charging current has dropped below 2% of nominal capacity, or total charging time of 24 to 36 hours.

#### Charging Curve Example

It is recommended that charging should be stopped if the electrolyte temperature reaches 50°C. It can recommence when the temperature has dropped back below 40°C.

In an application where multiple batteries are employed, there is also a need to provide an equalisation charge once a month. This ensures that every cell in the battery bank is fully charged and balanced. This is completed by fully charging the battery, then extending the charging time by another 12 to 24 hours at 14.4V.

For batteries used in seasonal applications and stored long term, fully recharge the battery prior to storing. Check the state of charge or voltage regularly. To maintain optimum performance, it is recommended that the battery is recharged at least once per month while in storage.

## **Discharge Curve Example**



Deep Cycle Product Charging Characteristics (80% DOD)



## CENTURY DEEP CYCLE RANGE: 89T, N70T, N70TX MF, NS70T, NS70TX MF, D23RT, D23LT, 12A, 43T, 86T





For more information visit centurybatteries.com.au or call 13 22 87