

# MOTOBATT

QuadFlex™ Battery  
 WWW.MOTOBATT.COM  
 MB51814



## Features

- Patented Quad Terminal Design - Reduce carrying costs
- 12V VRLA Hi Capacity Starting Battery
- Absorbed Glass Mat (AGM) technology
- Brass Terminals - superior conductivity
- US IATA certified non-spillable
- Highest AH Capacity in the Industry
- Factory Activated-Ready to Install

## Performance Specifications

**Nominal Voltage** ----- 12 volts (6 cells)

### Nominal Capacity

20-hr. (1.1A to 10.50 volts)-----	23.0 AH
10-hr. (2.2A to 10.50 volts)-----	22.0 AH
5-hr. (4.4A to 10.20 volts)-----	18.7 AH
1C. (22.0A to 9.6 volts)-----	40Min (14.7AH)
8C. (176A to 6.00 volts)-----	3Min (8.8AH)

**Approximate Weight** -----14.55 lbs. ( 6.60kg)

**Energy Density** (20-hr. rate) ----- 1.82W-h/in<sup>3</sup> (110.9 W-h/l)

**Specific Energy** (20-hr. rate) -----18.97W-h/lb (41.8 W-h/kg)

**Internal Resistance** (approx) ----- 16 milliohms

**CCA** (-0.4°F/-18°C,7.2V,30S)----- 220 amperes

**CA** (68°F/20°C,7.2V,30S)----- 275 amperes

**Shelf Life** (% of nominal capacity at 68°F (20°C)---- SOC% OCV

1 Month -----	97%	12.78V
3 Months -----	91%	12.7V
6 Months -----	83%	12.5V

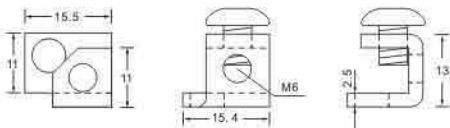
### Operating Temperature Range

Charge ----- -4°F (-20°C) to 122°F (50°C)  
 Discharge ----- -40°F (-40°C) to 140°F (60°C)

**Case** ----- ABS

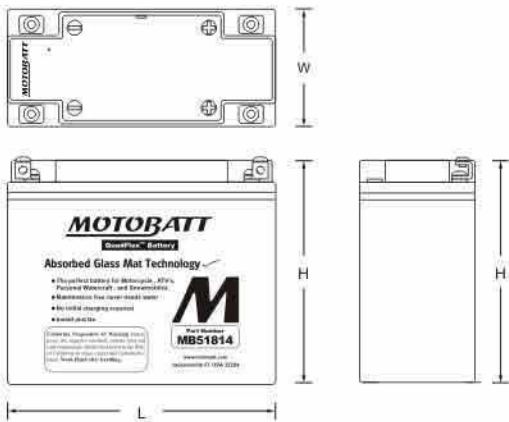
**Carton Contents** -----1-MotoBatt MB51814 Battery,  
 4 stainless steel terminal screws, 2 brass terminals, 4mm Allen Wrench, Install / user manual.

## Brass Terminals (mm)



Terminal Screws: Stainless, M6 Thread  
 Fastener: 4mm Allen Hex

## Physical Dimensions: (in./mm)



L:7.20(183) W:3.15(80) H:6.69(170)

Tolerances are +/0.04in.(+/-1mm) and +/0.08in.(+/-2mm) for height dimensions.

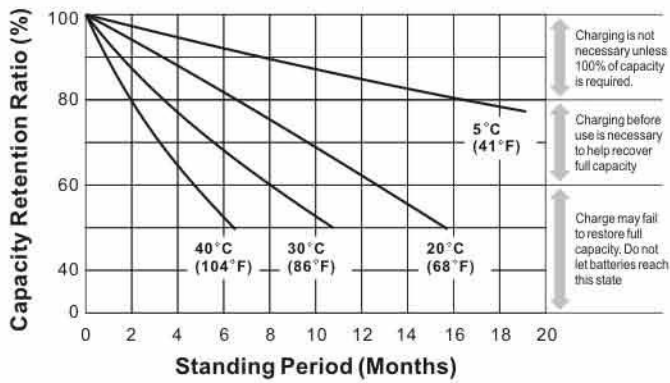


RETAIL CARTON

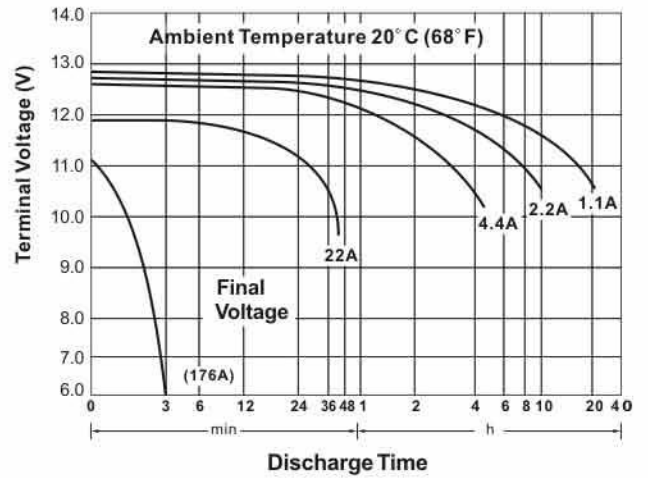


"C" TERMINAL TERMINAL COVER SCREW WRENCH

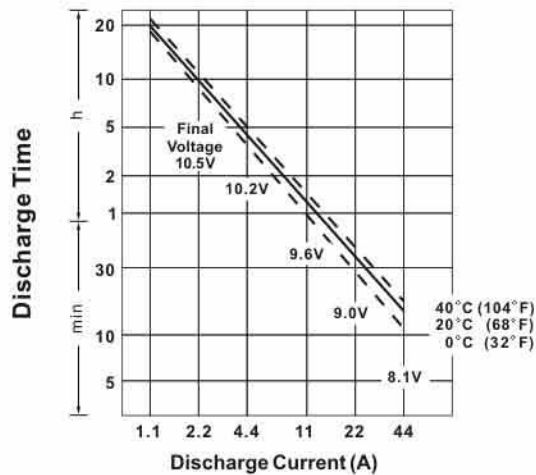
### Shelf life & Storage



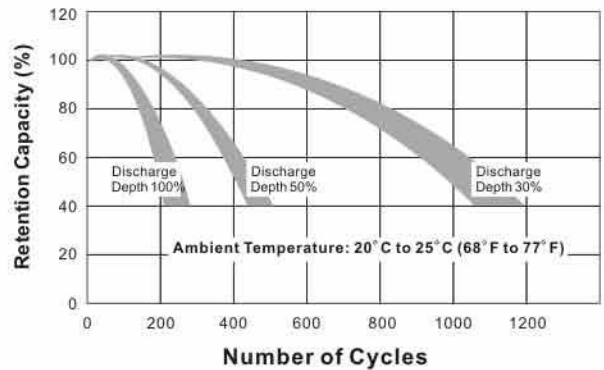
### Discharge Characteristics



### Discharge Time vs. Discharge Current



### Life Characteristics in Cyclic Use



### Charging

**Cycle Applications:** limit initial current to 6.6A. Charge until battery voltage (under charge) reaches 14.8 to 15.0 volts at 68°F (20°C). Hold at 14.8 to 15.0 volts until current drops to under 440mA. Battery is fully charged under these conditions, and charger should be disconnected or switched to "float" voltage.

**Note:** Due to the self-discharge characteristics of this type of battery, it is imperative that they be charged within 6 months of storage, otherwise permanent loss of capacity might occur as a result of sulfation.

### Chargers

MotoBatt offers a wide range of chargers suitable for batteries up to 4A. Please refer to the charger selection guide. Please contact our technical department for advice if you have difficulty in locating suitable models or contact us at [www.motobatt.com](http://www.motobatt.com)

### Can be used to replace

51814	51913		

### Further Information

Please refer to our website [www.motobatt.com](http://www.motobatt.com) to locate a distributor in your area.