



# VTM 42A-12

## Specifications

Nominal Voltage(V) **12V**

### Nominal Capacity

20 hour rate	(2.1A	to	10.50V)	42Ah
10 hour rate	(3.99A	to	10.50V)	39.9Ah
5 hour rate	(7.14A	to	10.20V)	35.7Ah
1 C	(42A	to	9.60V)	23.8Ah
3 C	(126A	to	9.60V)	16.8Ah

Weight **Approx. 13.4kg(29.5Lbs.)**

Internal Resistance (at 1KHz) **Approx. 7.5 mΩ**

Maximum Discharge Current for 5 seconds: **630A**

### Charging Methods at 25°C (77°F)

Cycle use:

Charging Voltage **14.4 to 15.0V**  
 Coefficient **-5.0mV/°C/cell**  
 Maximum Charging Current : **12.6A**

Standby use:

Float Charging Voltage **13.5 to 13.8V**  
 Coefficient **-3.0mV/°C/cell**

### Operating Temperature Range

Charge **-15°C (5°F) to 40°C (104°F)**  
 Discharge **-15°C (5°F) to 50°C (122°F)**  
 Storage **-15°C (5°F) to 40°C (104°F)**

### Charge Retention (shelf life) at 20°C (68°F)

1 month **92%**  
 3 month **90%**  
 6 month **80%**

Case Material **ABS UL94 HB**

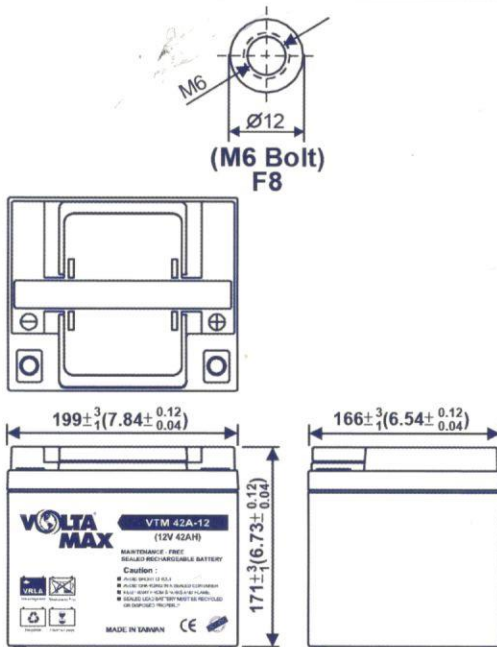
Terminal **F8**

Description of torque value of hard ware for the terminals:

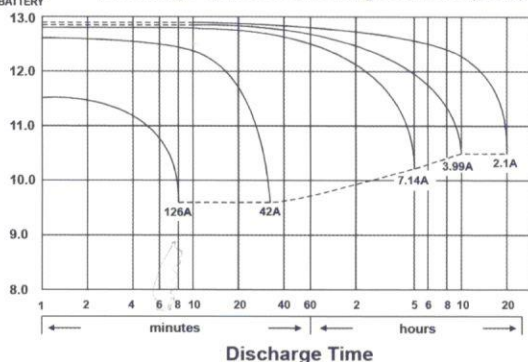
Recommended torque value **M6: 7 N-m (71kgf-cm)**  
 Maximum allowable torque value **M6: 9 N-m (92kgf-cm)**

## Dimensions

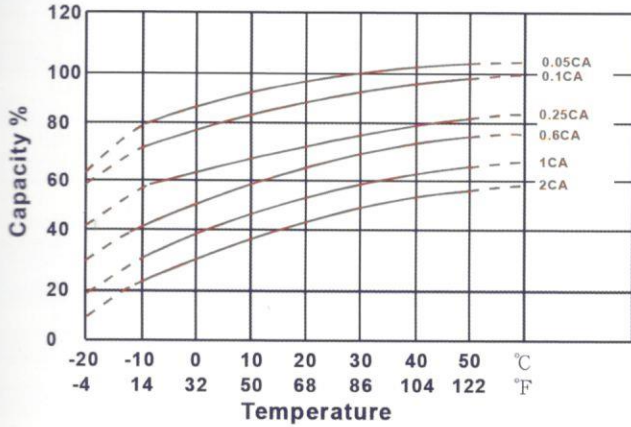
mm(inch)



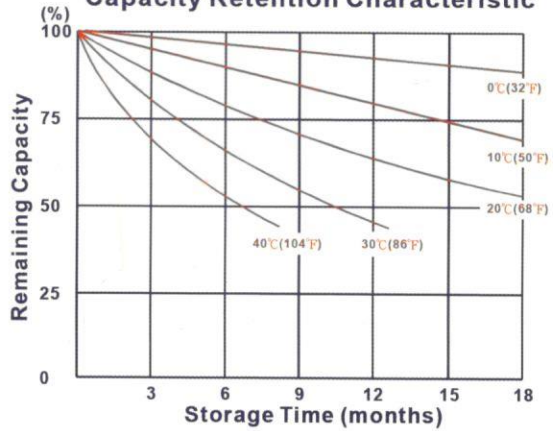
(V) FOR 12V BATTERY **Discharge Time VS. Discharge Current (25°C)**



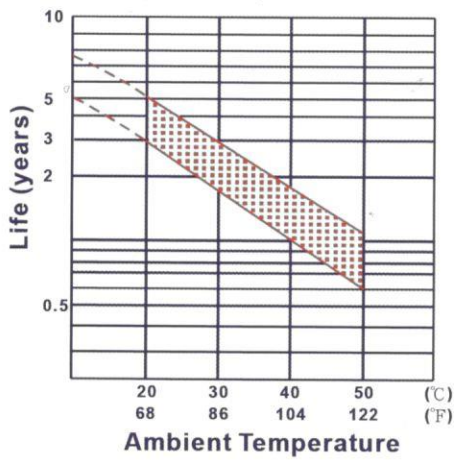
**Effect of Temperature on Capacity 25°C (77°F)**



**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**Cycle Service Life**

