



# VTM 28A-12

## Specifications

Nominal Voltage(V) **12V**

### Nominal Capacity

20 hour rate	(1.4A	to	10.50V)	28Ah
10 hour rate	(2.66A	to	10.50V)	26.6Ah
5 hour rate	(4.76A	to	10.20V)	23.8Ah
1 C	(28A	to	9.60V)	15.87Ah
3 C	(84A	to	9.60V)	11.2Ah

Weight **Approx. 9.3kg(20.46Lbs.)**

Internal Resistance (at 1KHz) **Approx. 11 mΩ**

Maximum Discharge Current for 5 seconds: **420A**

### Charging Methods at 25°C (77°F)

Cycle use:

Charging Voltage **14.4 to 15.0V**

Coefficient **-5.0mV/°C/cell**

Maximum Charging Current : **8.4A**

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 **F6**

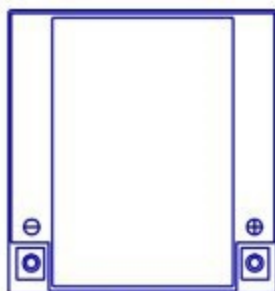
Description of torque value of hard ware for the terminals:

Recommended torque value **M5: 5 N-m (51kgf-cm)**

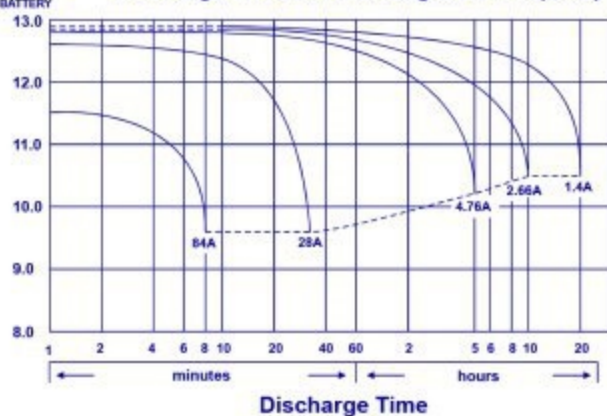
Maximum allowable torque value **M5: 6 N-m (61kgf-cm)**

## Dimensions

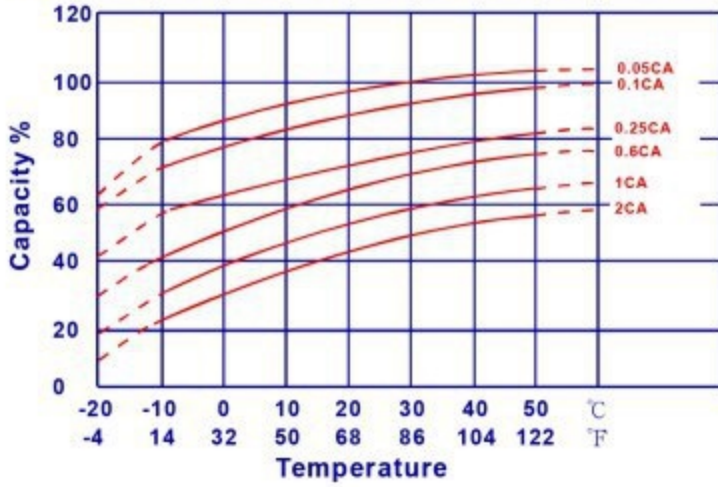
mm(inch)



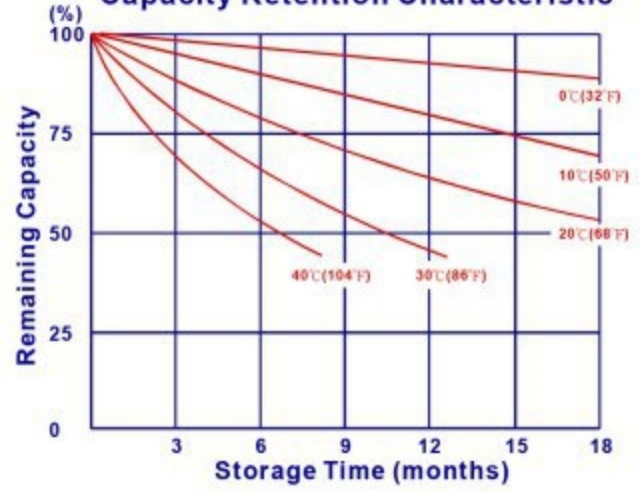
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



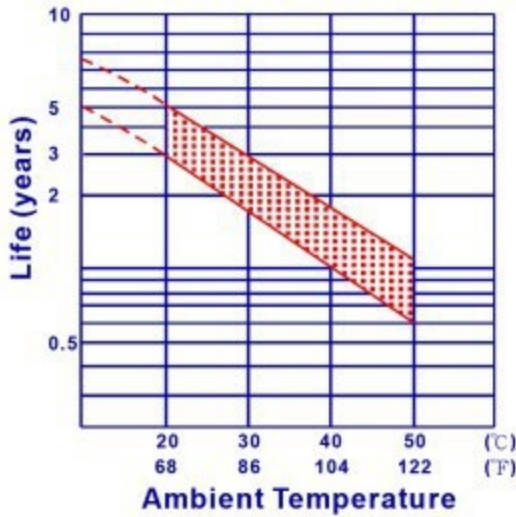
**Effect of Temperature on Capacity 25°C (77°F)**



**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**Cycle Service Life**

