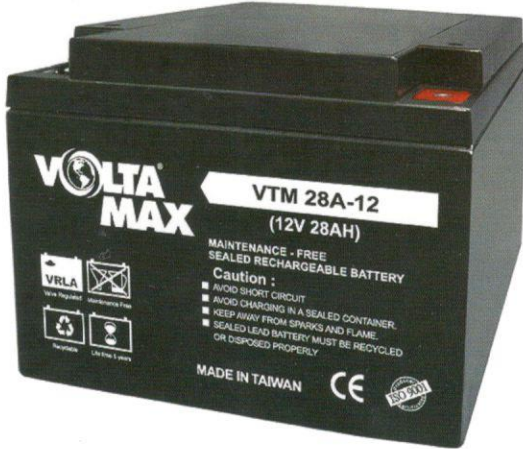


# VTM 28A-12



## 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)

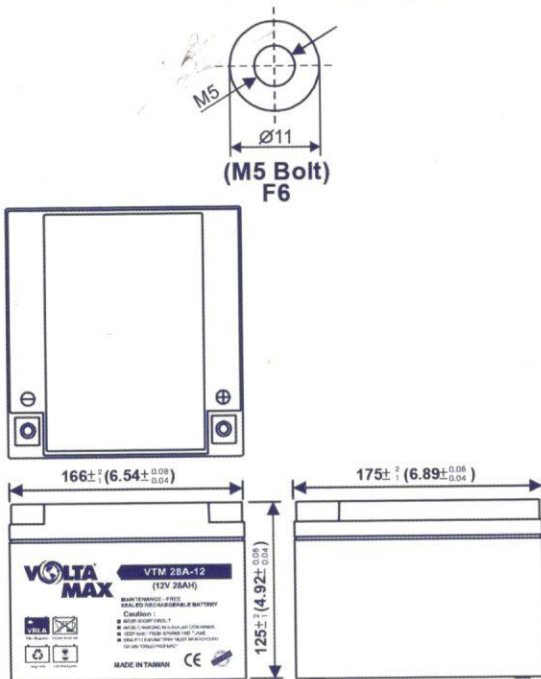
1 month	92%
3 month	90%
6 month	80%

Case Material **ABS UL94 HB**

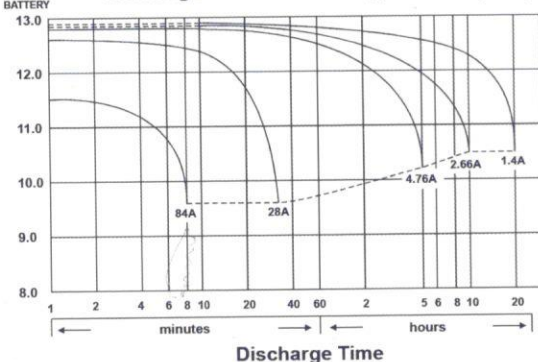
Terminal **F6**

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)**

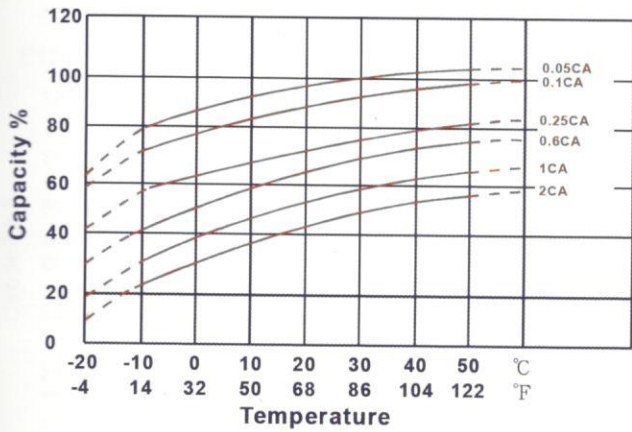
## Dimensions mm(inch)



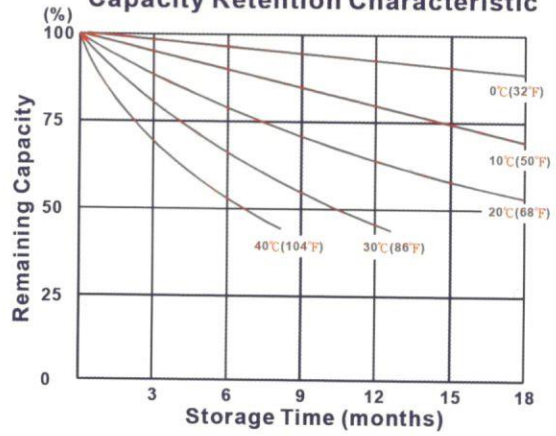
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



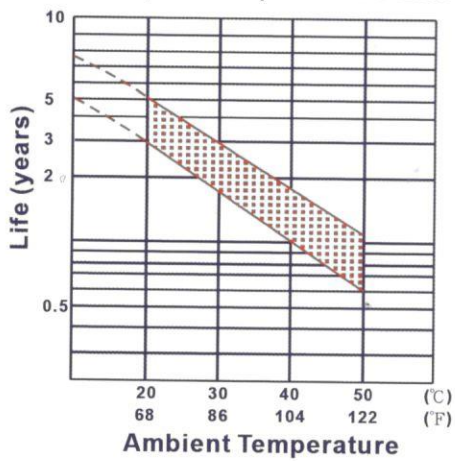
**Effect of Temperature on Capacity 25°C (77°F)**



**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**Cycle Service Life**

