



# Valve Regulated Lead-Acid Rechargeable Battery



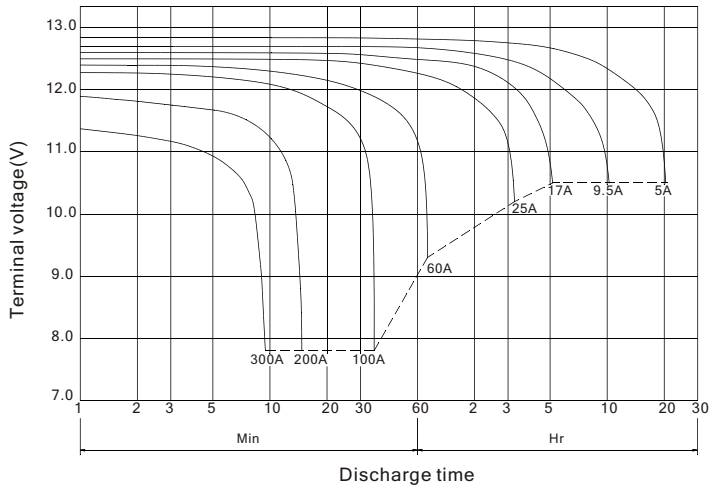
## EP100-12

The battery is constructed by plates, separators, safety valves, flame arrestors and container. Since the electrolyte is held by a glass-mat separator and plates, the battery can be used in any direction and position without leakage.

### PERFORMANCE SPECIFICATIONS

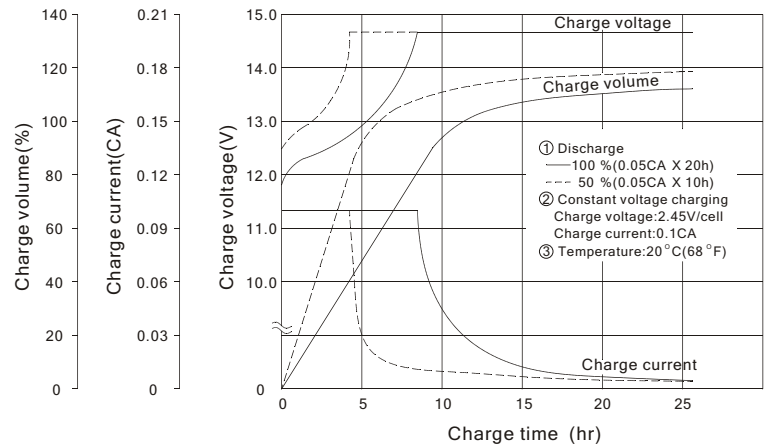
Nominal Voltage(V).....	12 volts(6cells in series)
Nominal Capacity(AH)	
20 Hour rate F.V.(1.75V/cell) (5.00A to 10.50volts) .....	100A.H.
10 Hour rate F.V.(1.75V/cell) (9.50A to 10.50volts) .....	95A.H.
5 Hour rate F.V.(1.75V/cell) (17.0A to 10.50volts).....	85A.H.
30 Min rate F.V.(1.30V/cell) (100.0A to 7.80volts).....	50A.H.
Approximate Weight.....	40.0kg(88.2lbs.)
Terminal	
Standard.....	Type B4
Optional.....	Type I2
Internal Resistance (Fully Charged Battery).....	<4mΩ
Maximum Discharge Current For 5 sec.(A).....	1000A
Maximum Charge Current(A).....	30A
Ambient Temperature	
Charge.....	0°C(32°F)~40°C(104°F)
Discharge.....	-20°C(-4°F)~50°C(122°F)
Storage.....	-20°C(-4°F)~40°C(104°F)
Case.....	ABS
Dimension(mm/inch)	
Length           ±2mm.....	407/16.02
Width           ±2mm.....	173/6.81
Container Height ±2mm.....	210/8.27
Total Height   ±2mm.....	239/9.41
Application.....	EV, TELCOM, Golf-Carts.

## EP100-12 Battery discharge characteristics (25 °C/77 °F)



## Battery Charging Characteristics

(Typical example of the charge characteristics for the standby use)



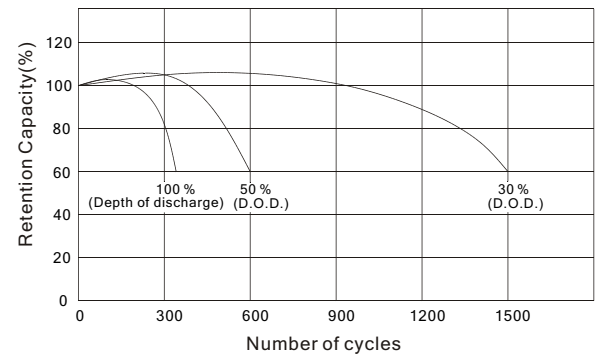
## Charging Procedure

Application	Charging method	Charging Voltage at 20 °C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C/cell)	Max. charging current (CA)	Charging time 0.1CA, 20 °C (h)		Temp (°C)
					100% discharge	50% discharge	
For standby power Source	Constant voltage & Constant current charging (with current restriction)	2.25~2.30	-3	0.3	24	20	0~40 (32~104°F)
For cycle service		2.40~2.50	-4	0.3	16	10	

\*Temperature compensation of charging voltage is not needed, when using the batteries within 5 °C to 35 °C range.

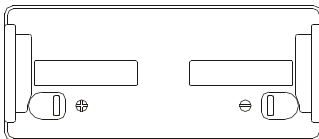
## Battery Life Characteristics of Cyclic Use

Testing Conditions : Discharge Current : 0.25C Amp (F.V. 1.7V/cell)  
Charging Current : 0.1C Amp  
Charging Volume : 120% OF Discharge Capacity  
Ambient Temperature : 20 °C (68 °F)



## OUTER DIMENSIONS

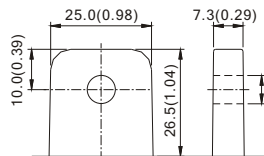
mm (inch)



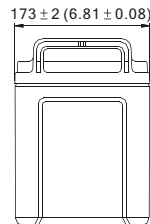
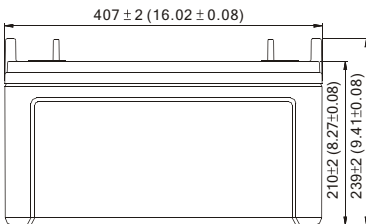
## TERMINAL TYPE

mm (inch)

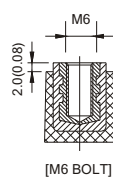
● Terminal B4



(M6 BOLT & NUT)



● Terminal I2

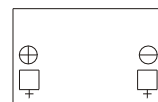


(M6 BOLT)

## Constant power discharge characteristics at 25 °C/77 °F

Final Voltage	Discharge time								
	5Min	10Min	15Min	30Min	1Hr	3Hr	5Hr	10Hr	20Hr
10.80V	3257	2448.6	1982.9	1192.9	691.4	291.4	201.4	112.29	58.71
10.50V	3771	2652.9	2075.7	1238.6	711.4	297.1	204.3	114.00	60.00
10.20V	4000	2748.6	2138.6	1265.7	724.3	300.0	205.7	114.57	60.29
9.90V	4186	2814.3	2188.6	1284.3	734.3	302.9	207.1	114.86	60.43
9.60V	4314	2870.0	2231.4	1297.1	741.4	304.3	207.1	114.86	60.43

## TERMINAL POSITION



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