

# Sealed Lead-Acid Battery

Absorbant Glass Mat (AGM) technology for superior performance. Valve regulated, spill proof construction allows safe operation in any position. Approved for transport by air. D.O.T., I.A.T.A., F.A.A. and C.A.B. certified.

# UX12900

Maintenance-Free

## Specification

<b>Nominal Voltage</b>	12 volts		
<b>Nominal Capacity</b>	77° F (25° C)		
20-hr. (4.50A)	90 Ah		
10-hr. (8.37A)	83.7 Ah		
5-hr. (15.30A)	76.5 Ah		
1-hr. (54.00A)	54.0 Ah		
<b>Approximate Weight</b>	62.5 lbs (28.0 kgs)		
<b>Internal Resistance (approx.)</b>	7mΩ		
<b>Shelf Life (% of normal capacity at 77° F (25° C))</b>			
3 Months	6 Months	12 Months	
91%	82%	64%	
<b>Temperature Dependency of Capacity (20 hour rate)</b>			
104° F	77° F	32° F	5° F
102%	100%	85%	65%
<b>AGM Operational Temperature</b>			
Charge	32°F to 104°F (0°C to 40°C)		
Discharge	5°F to 113°F (-15°C to 45°C)		
<b>AGM Storage Temperature</b>	5°F to 104°F (-15°C to 40°C)		
<b>Recharge Cycles @ 50%</b>	More than 600 cycles		
<b>Marine Cranking Amp Rating</b>	832 Amps		
<b>Cold Cranking Amp Rating</b>	640 Amps		
<b>Reserve Capacity Rating</b>	150 Min.		



### Charge Method (Constant Voltage)

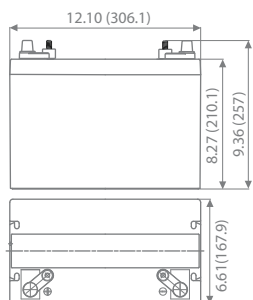
### Cycle Use (Repeating Use)

Initial Current	27 A or smaller
Control Voltage	14.6 - 14.8 V

### Float Use

Control Voltage	13.6 - 13.8 V
-----------------	---------------

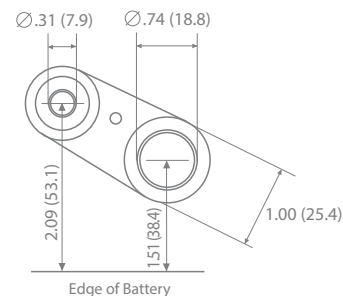
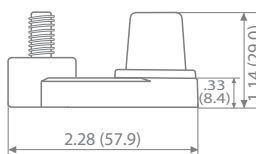
## Physical Dimensions: in (mm)



L: 12.10 in (306.1 mm)  
 W: 6.61 in (167.9 mm)  
 H: 8.27 in (210.1 mm)  
 TH: 9.36 in (257 mm)  
 Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

### Terminals

#### Marine Combo Post



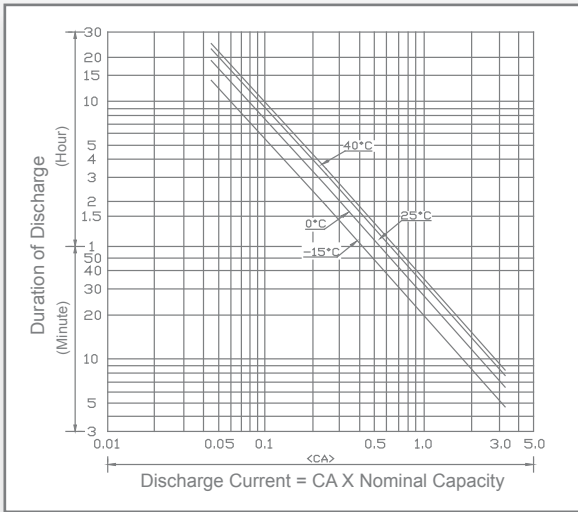
## Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	309.3	225.7	158.8	96.1	50.2	29.3	21.5	16.7	13.8	9.7	8.8	4.7
10.20V	272.5	205.7	142.1	91.1	47.2	27.9	20.9	16.3	13.5	9.5	8.5	4.6
10.50V	262.5	195.6	133.8	88.6	46.0	27.3	20.4	16.1	13.4	9.4	8.4	4.6
10.80V	252.5	185.6	125.4	86.1	44.3	26.6	19.9	15.8	13.0	9.2	8.4	4.5
11.10V	242.4	175.6	117.0	83.6	42.6	25.9	19.2	15.3	12.7	8.9	7.9	4.3

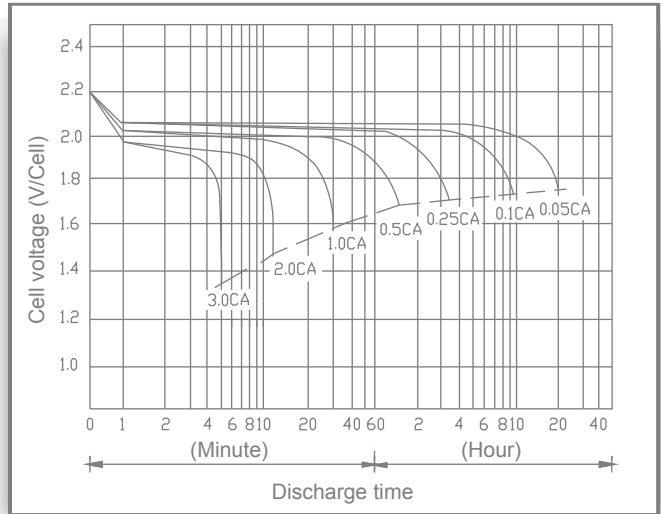
## Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	3284.6	2480.4	1687.0	1020.8	581.0	338.6	249.1	194.0	159.7	112.9	102.0	54.9
10.20V	3025.5	2283.1	1577.5	1011.6	545.9	323.5	242.4	188.9	125.5	110.4	99.5	53.5
10.50V	2977.0	2218.7	1516.5	1004.9	528.4	316.0	236.6	185.6	154.7	109.5	97.8	52.8
10.80V	2938.5	2160.2	1459.7	1002.4	514.1	309.3	231.6	182.2	152.2	107.0	97.0	52.6
11.10V	2885.0	2089.2	1392.8	994.8	507.5	308.5	229.1	181.4	151.3	106.2	94.5	51.0

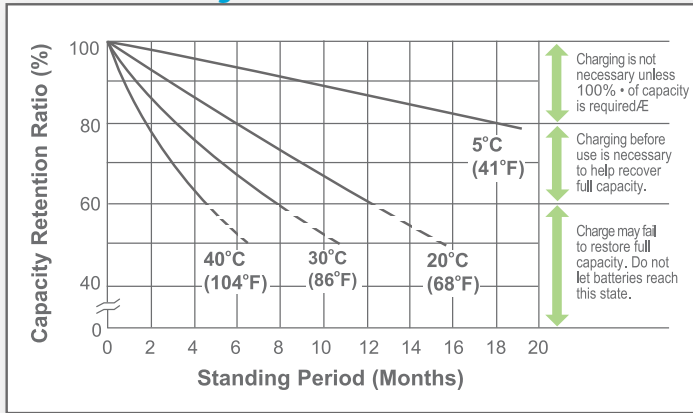
## Discharge Time vs. Discharge Current



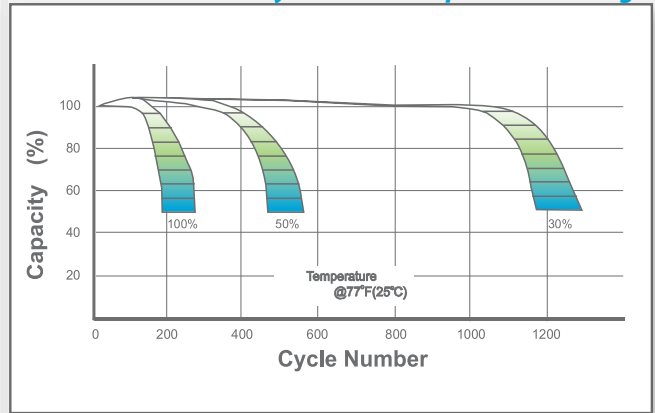
## Discharge Characteristics



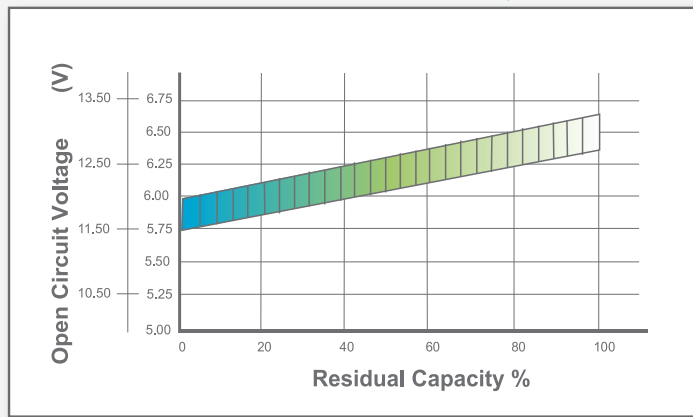
## Shelf Life & Storage



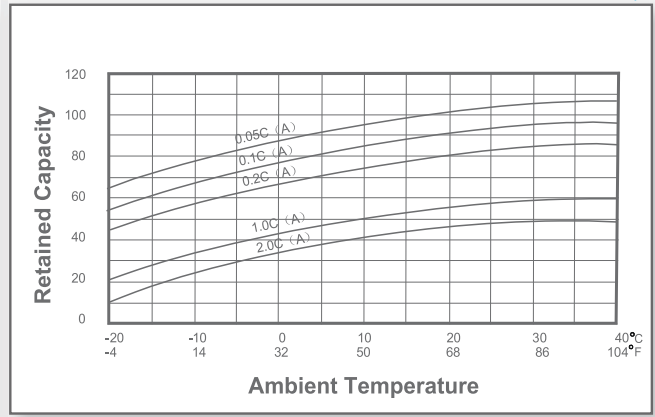
## Cycle Life vs Depth of Discharge



## Open Circuit Voltage vs Residual Capacity



## Effect of Temperature on Capacity



Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.30C
Standby	25°C(77°F)	2.325	2.30~2.35	

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C