



# GEL Battery

Celled Silica technology for superior performance. Valve regulated, spill proof construction 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. U.L. recognized under file number MH 20567.

UPG No. 40702



Maintenance-Free

## Specification

<b>Nominal Voltage</b>	12 volts		
<b>Nominal Capacity</b>	77° F (25° C)		
20-hr. (11.00A)	220.0 Ah		
10-hr. (21.00A)	210 Ah		
5-hr. (37.00A)	185 Ah		
1-hr. (150.0A)	150 Ah		
<b>Approximate Weight</b>	160.94 lbs (73.0 kgs)		
<b>Internal Resistance (approx.)</b>	5mΩ		
<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</b>	(20 hour rate)		
104° F	77° F	32° F	5° F
102%	100%	85%	65%



## Charge Method (Constant Voltage)

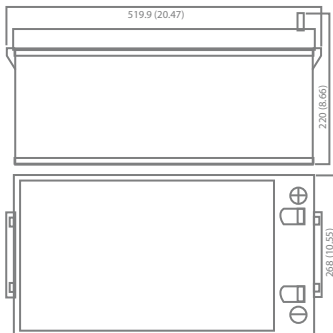
## Cycle Use (Repeating Use)

Initial Current	50 A or smaller
Control Voltage	14.2 - 14.4 V

## Float Use

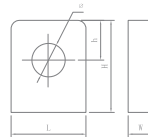
Control Voltage	13.2 - 13.4 V
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## Physical Dimensions: in (mm)



**L:** 20.47 in (519.9 mm)  
**W:** 10.55 in (268 mm)  
**H:** 8.66 in (220 mm)  
**TH:** 9.65 in (245.1 mm)  
 Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

## Terminals



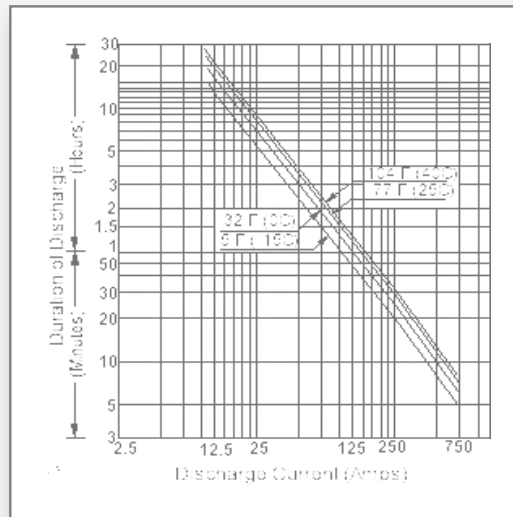
## L Series (L Type Terminal)

Dimension Type	L	W	H	h	ø
L4	26.5	8.0	24.5	12.0	9.0

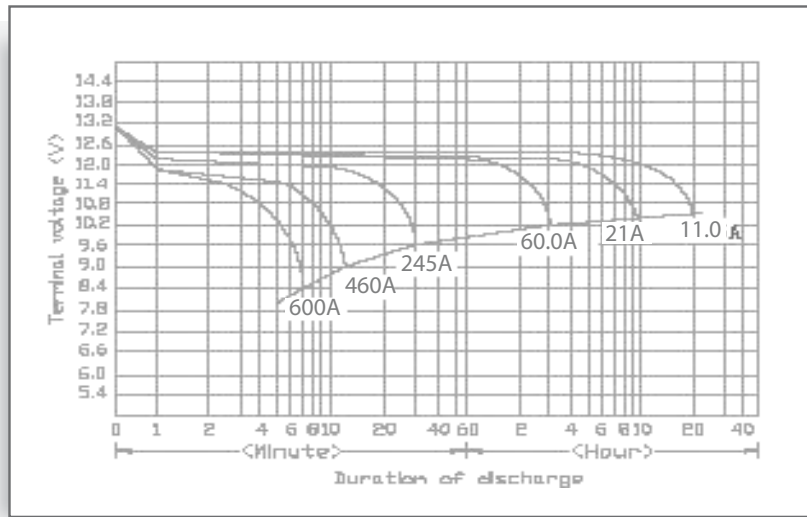
## Constant Current Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	5MIN	10MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	6HR	7HR	8HR	10HR	20HR	24HR
1.75V	600	460	245	150	83.3	60.0	42.0	37.0	33.0	29.0	25.5	21.0	11.0	9.4

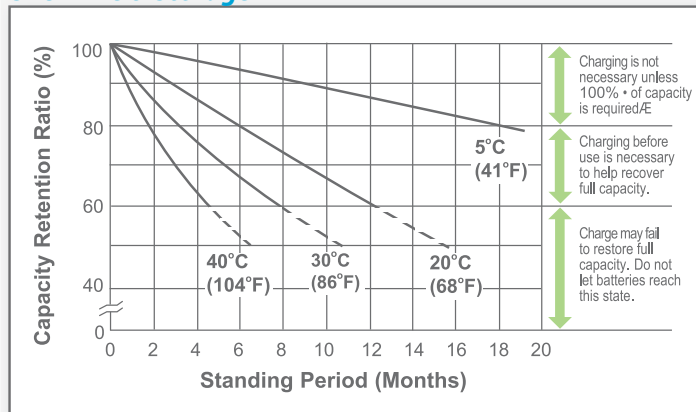
## Discharge Time vs. Discharge Current



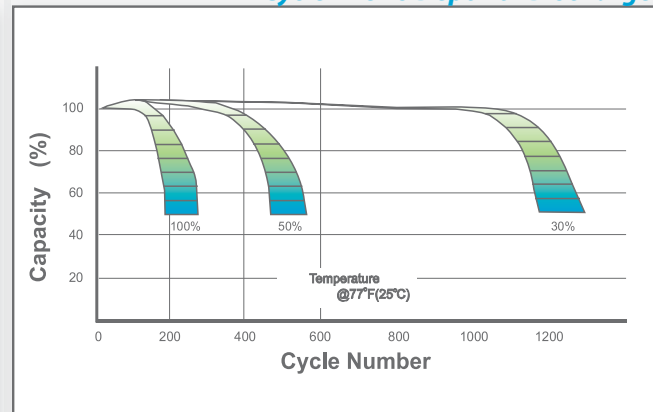
## Discharge Characteristics



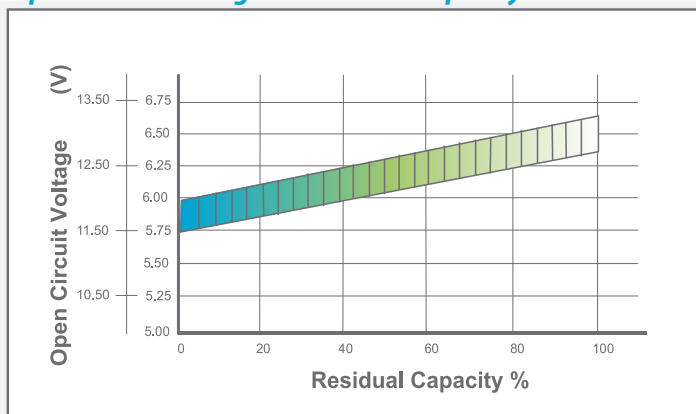
## Shelf Life & Storage



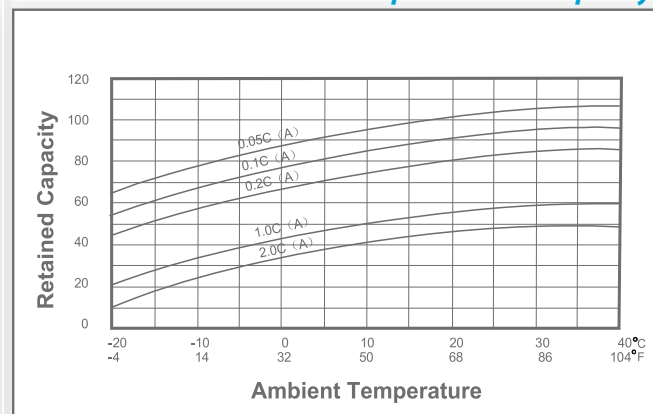
## Cycle Life vs Depth of Discharge



## Open Circuit Voltage vs Residual Capacity



## Effect of Temperature on Capacity



## Charge Current & Final Discharge Voltage

Application	Charge Voltage(V/Cell)			Max.Charge Current	Final Discharge Voltage V/Cell	Discharge Current(A)	1.75	1.70	1.60	1.30
	Temperature	Set Point	Allowable Range							
Cycle Use	25°C(77°F)	2.40	2.37~2.40	0.20C	Discharge	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C	
Standby	25°C(77°F)	2.23	2.20~2.23							



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