

# GDC100-12 12V 100Ah

# Sealed Lead Acid AGM Battery

#### **Features**

DC Gel Extreme Cycling Series:

- Fumed Silica Gel is added to further extend cycle life
- Designed for long life in high cycling applications where battery is required to discharge or power and operate the application on a routine basis.
- Proprietary precious metal additives are blended into the grid materials and refined (4BS) active material to optimize the structure increasing cycle-life, and reducing internal resistance. This makes the batteries cycle longer and charge better and faster, while extending overall life.
- 5-7 year service life in standby applications at 25° C temperatures.

  Cycles over 600 times at 60% depth of discharge yet will perform equally well in standby and other applications where both conditions are required.
- Valve Regulated Lead Acid (VRLA), Absorbent Glass Mat (AGM), and Gel Technology Safe operation in any position Lead-calcium alloy grids and the use of high purity virgin lead
- Externally sealed Flame retardant ABS case and cover to UL94-HB specifications
- UL recognized (UR) as a component in UL approved equipment installations under File number MH46202
- Classified as non-spillable status for transportation making it non-hazardous for normal transportation processes. Approved for transport by air. Fulfills US D.O.T., I.A.T.A., F.A.A., C.A.B. handling and shipping requirements
- For more details on special design and construction details see Features and Benefits publication on www.oraclebattery.com





#### Specification

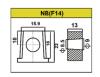
Cell per unit	6	Ambient Temperature			
Nominal Voltage (V)	12	Charge 0°C (32°F) to 40°C (104°F)			
Nominal Capacity (Ah)	100Ah @ 20 ho <mark>ur rat</mark> e to 1.75vpc	Discharge <mark>-15°</mark> C (5°F) to 50°C (122°F)			
Weight	Approx 29.0kg (63.93lbs.)	Storage -15°C (5°F) to 40°C (104°F)			
Internal Resistance (1KHz)	≤5mΩ	Max Charge C <mark>urren</mark> t			
Max Discharge Current (5s)	1080A (5s)	Max charge c <mark>urren</mark> t 30A			
Battery Life	Stand by : 5~7 <mark>years</mark>	<b>Cycle use</b> : Charge voltage: 14.4 to 15.0V			
Terminal Type	erminal Type NB(F14)/IT(F8) Stand by: Charge voltage: 13.5				
Container Material	ABS 94-HB flame retardant case (94V-0 Optional)				



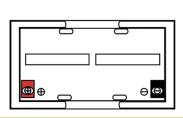
#### **Dimensions**

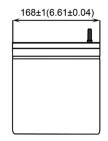
I		Length		Height	Total Height		
	Unit mm	nit mm 305±1		208±1	230±1		
ı	Unit inch	12.01±0.04	6.61±0.04	8.19±0.04	9.06±0.04		



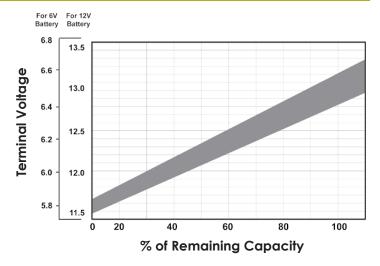




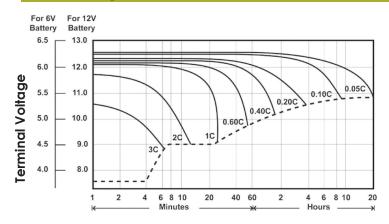




# Terminal Voltage



# Discharge Times



Time to Ending Voltage

### Charge Voltages

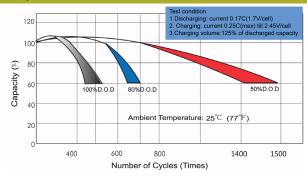
Temperature Compensated Charging

Average Temperature	Cycle Charging Volts Per Cell	Float Charging Volts Per Cell			
-40°C (-40°F)	2.85-2.95	2.38-2.43			
-20°C (-4°F)	2.67-2.77	2.34-2.39			
-10°C (14°F)	2.61-2.71	2.32-2.37			
0°C (32°F)	2.55-2.65	2.30-2.35			
10°C (50°F)	2.49-2.59	2.28-2.33			
20°C (68°F)	2.43-2.53	2.26-2.31			
25°C (77°F)	2.40-2.50	2.25-2.30			
30°C (86°F)	2.37-2.47	2.24-2.29			
40°C (104°F)	2.31-2.41	2.22-2.27			
50°C (122°F)	2.25-2.35	2.20-2.25			

#### Temperature Storage

Average Storage Temperature	Recharging Interval
68°F	Every 9 months
77°F	Every 6 months
95°F	Every 3 months

#### Cycle Life



### Constant Current Discharge Characteristics (25°C 77°F)

F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	329.00	180.00	111.70	68.70	33.80	28.20	16.90	11.20	9.47	4.91
1.67V	312.40	177.90	110.00	67.50	32.70	27.80	16.30	11.00	9.37	4.88
1.70V	297.00	172.30	109.20	67.20	31.60	27.70	15.90	10.90	9.18	4.82
1.75V	270.20	168.40	108.10	65.80	30.60	27.10	15.50	10.70	9.09	4.73
1.80V	246.50	160.90	105.00	64.80	29.50	27.10	15.10	10.50	9.00	4.68

