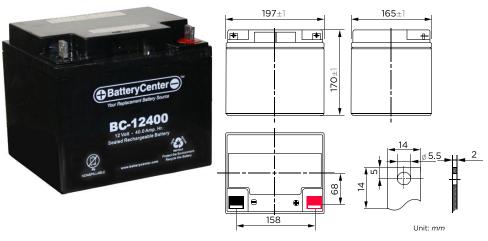


Your Replacement Battery Source

### Rechargeable Sealed Lead Acid Battery

## **BC-12400NB**

### (12V 40Ah/10hr)



These rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

Battery Construction										
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte		
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid		

### **SPECIFICATION**

Nominal voltage	12V
Number of cells	6
Length (mm/inch)	197/7.76
Width (mm/inch	165/6.5
Height(mm/inch)	170/6.69
Total Height (mm/inch)	170/6.69
Approx.Weight (kg/lbs)	12.5/27.5

#### **General Features**

- Absorbent Glass Mat(AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transportcomplies with IATA/ICAO Special Provision A67.
- · UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

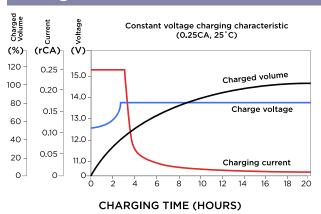
Performance Characteristics							
	20 hour rate (2.1A, 10.8V)	42Ah					
Capacity 77°F(25°C)	10 hour rate (4A, 10.5V)	40Ah					
Capacity // F(23 C)	5 hour rate (6.8A, 10.5V)	34Ah					
	1 hour rate (25A, 9.6V)	25Ah					
Internal Resistance	Full charged Battery77°F(25°	C):10mΩ					
	104°F(40°C)	102%					
Capacity affected by	77°F(25°C)	100%					
<b>Temperature</b> (20 hour rate)	32°F(10°C)	85%					
(201104114(0)	5°F(-15°C)	65%					
Calf Disabayas	Capacity after 3 month storage	90%					
Self-Discharge 68°F(20°C)	Capacity after 6 month storage	80%					
001(20 0)	Capacity after 12month storage	60%					
Max. discharge current 77°F(25°C): 400A(5S)							
Charge	Float: 13.6-13.8 V/77°F/(25°C)						
(Constant Voltage)	Cycle: 14.4-14.7 V/77°F/(25°C) Max. Current: 10A						

Discharge Constant Current (Amperes at 77°F 25°C)									
End Points Volts/Cell	5 min	10 min	15 min	30 min	1h	3h	5h	10h	20h
1.60V	130	92.0	72.0	42.0	25.0	10.2	7.00	4.14	2.18
1.65V	123	87.4	69.3	40.7	24.2	10.1	6.90	4.09	2.17
1.70V	118	82.7	66.5	39.1	23.3	10.0	6.85	4.05	2.15
1.75V	109	78.1	63.2	37.2	22.1	9.85	6.80	4.00	2.13
180V	100	71.0	58.0	3 <u>4</u> 9	20.8	9 71	6.70	3 95	210

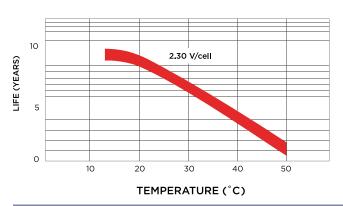
Discharge Constant Power (Watts at 77°F 25°C)									
End Points Volts/Cell	5 min	10 min	15 min	30 min	45 min	1h	2h	3h	5h
1.60V	232	155	113	69.4	54.2	44.5	28.5	19.3	13.7
1.65V	218	146	107	65.9	51.7	42.6	27.6	18.8	13.5
1.70V	203	137	101	62.3	49.1	40.7	26.7	18.3	13.2
1.75V	189	128	94.0	58.7	46.5	38.7	25.6	17.7	12.9
1.80V	175	119	88.1	55.1	43.8	36.6	24.5	17.1	12.6



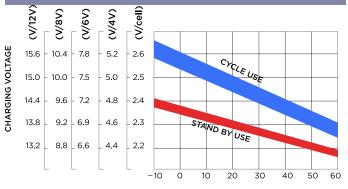
#### Charge characteristic curve



### Temperature effects on float life

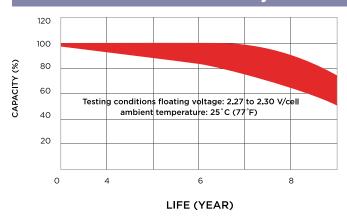


## Relationship between charging voltage and temperature

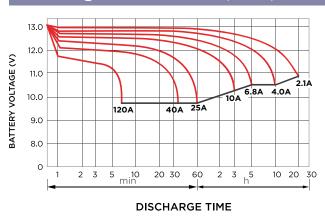


AMBIENT TEMPERATURE (°C)

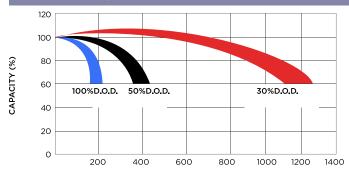
### Life characteristics of standby use



### Discharge characteristic (25°C)

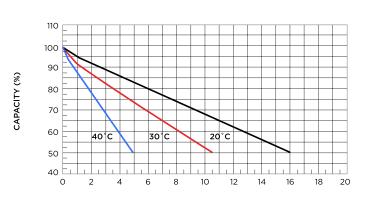


# Cycle service life in relation to depth of discharge



NUMBER OF CYCLES (CYCLES)

### Self-discharge characteristic



STORAGE TIME: MONTHS

### **Temperature effects on capacity**

