

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates 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**

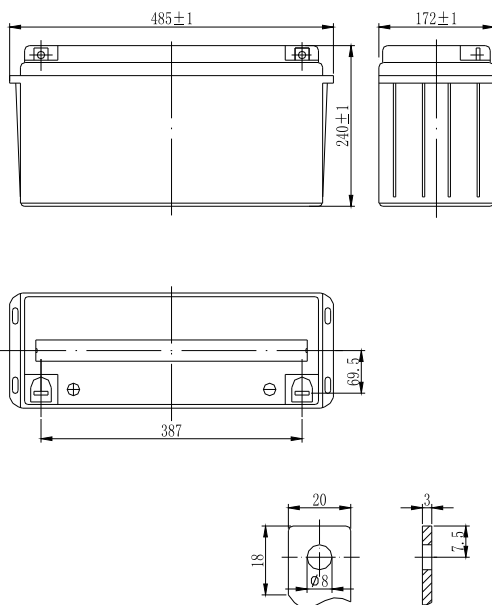
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

**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 transport-complies 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.

**Dimensions and Weight**

Length(mm / inch).....485 / 19.09  
 Width(mm / inch).....172 / 6.77  
 Height(mm / inch).....240 / 9.45  
 Total Height(mm / inch).....240 / 9.45  
 Approx. Weight(Kg / lbs).....47 / 103.6



**Performance Characteristics**

Nominal Voltage .....12V  
 Number of cell .....6  
 Design Life .....10 years  
 Nominal Capacity 77°F(25°C)  
     20 hour rate (7.5A, 10.5V).....150Ah  
     10 hour rate (14.4A, 10.5V).....144Ah  
     5 hour rate (25.4A, 10.5V).....127Ah  
     1 hour rate (99A, 9.6V).....99Ah  
 Internal Resistance  
     Fully Charged battery 77°F(25°C).....3.7mOhms  
 Self-Discharge  
     3% of capacity declined per month at 20°C(average)  
 Operating Temperature Range  
     Discharge.....-20~60°C  
     Charge.....-10~60°C  
     Storage.....-20~60°C  
 Max. Discharge Current 77°F(25°C).....1000A(5s)  
 Short Circuit Current.....2700A  
 Charge Methods: Constant Voltage Charge 77°F(25°C)  
     Cycle use.....14.4-14.7V  
     Maximum charging current.....45A  
     Temperature compensation.....-30mV/°C  
     Standby use.....13.6-13.8V  
     Temperature compensation.....-20mV/°C

**Discharge Constant Current (Amperes at 77°F25°C)**

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	432	337	274	158	99.0	39.6	26.9	15.1	7.77
1.65V	402	317	259	154	97.0	38.7	26.5	14.8	7.70
1.70V	372	297	246	149	95.1	37.9	26.0	14.6	7.61
1.75V	342	277	232	143	92.2	37.1	25.4	14.4	7.50
1.80V	307	255	219	140	89.2	36.0	25.0	14.2	7.38

**Discharge Constant Power (Watts at 77°F25°C)**

End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	738	588	483	314	214	195	109	75.7	51.9
1.65V	708	559	466	304	210	192	107	74.8	51.6
1.70V	662	529	449	295	205	189	105	73.9	51.2
1.75V	616	501	430	286	200	184	103	73.0	50.9
1.80V	567	470	410	276	196	178	102	71.8	50.4

