

Overview

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 oneway 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.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.
- Case and cover available in both standard and flame retardant ABS.

Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Design Life	15years
Nominal Capacity 77°F (25°C)	
10 hour rate (20.0A, 10.8V)	200Ah
5 hour rate (35.8A, 10.5V)	179Ah
1 hour rate (131A, 9.6V)	131Ah
Internal Resistance	
Fully Charged battery 68°F (20°C)	≤3.5 mOhms
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)	1100A(5s)
Short Circuit Current	3000A
Charge Methods: Constant Voltage Charge 77°F (25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	60A
Temperature compensation	-30mV/°C
Standby use	2.20-2.30VPC
Temperature compensation	-20mV/°C

Dimensions and Weight

Length(mm / inch)	550 / 21.7
Width(mm / inch)	125 / 4.92
Height(mm / inch)	315 / 12.4
Total Height(mm / inch)	315 / 12.4
Approx. Weight(Kg / lbs)	60.5/ 133.38

* Weight deviation: ± 3%

Discharge Constant Current (Amperes at 68°F20°C)

End Point Volts/Cell	Time							
	15min	30min	45min	1h	1.5h	3h	5h	10h
1.60V	333	219	162	131	96.9	57.2	36.6	20.4
1.65V	308	213	159	127	94.0	56.7	36.3	20.3
1.70V	285	207	156	123	93.5	56.0	36.0	20.2
1.75V	261	202	154	120	91.2	56.3	35.8	20.1
1.80V	245	198	152	117	88.9	55.8	35.6	20.0

Discharge Constant Power (Watts at 68°F20°C)

End Point Volts/Cell	Time							
	15min	30min	45min	1h	1.5h	3h	5h	10h
1.60V	641	428	312	255	186	114	73.0	40.9
1.65V	610	416	308	248	181	113	72.8	40.8
1.70V	595	404	304	241	177	112	72.6	40.7
1.75V	553	394	302	236	173	111	72.4	40.6
1.80V	520	386	300	231	170	110	72.0	40.5

(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.



