

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

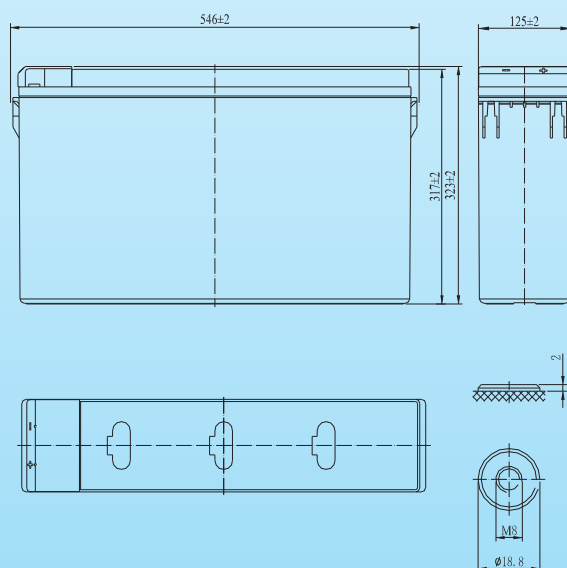
General Features

- 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.
- 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.
- Case and cover available in both standard and flame retardant ABS.

Dimensions and Weight

Length(mm / inch)	546 / 21.5
Width(mm / inch)	125 / 4.92
Height(mm / inch)	317 / 12.5
Total Height(mm / inch)	323 / 12.7
Approx. Weight(Kg / lbs)	45 / 99.2

* Weight deviation: $\pm 3\%$



Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Design Life	10years
Nominal Capacity 68°F(20°C)	
10 hour rate (15.0A, 10.8V)	150Ah
5 hour rate (27.2A, 10.5V)	136Ah
1 hour rate (110A, 9.6V)	110Ah
Internal Resistance	
Fully Charged at 20°C	$\leq 6.0\text{mOhms}$
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 (20°C)	1050A(5s)
Short Circuit Current	2680A
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	45A
Temperature compensation	-30mV/°C
Standby use	2.20-2.30VPC
Temperature compensation	-20mV/°C

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

End Point	Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	---	---	---	176	136	110	46.3	28.2	15.4
1.65V	---	---	---	170	132	108	45.5	27.9	15.3
1.70V	---	---	---	163	127	105	44.6	27.6	15.2
1.75V	---	---	---	155	122	102	43.7	27.2	15.1
1.80V	---	---	---	146	116	98.5	42.7	26.7	15.0

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

End Point	Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	---	---	---	296	232	190	118	87.6	57.4
1.65V	---	---	---	286	226	186	116	86.2	56.6
1.70V	---	---	---	274	218	181	114	84.6	55.7
1.75V	---	---	---	260	210	175	111	82.9	54.6
1.80V	---	---	---	245	200	168	107	81.2	53.5

(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.

