



KB2500E 2V 500Ah(10hr)

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

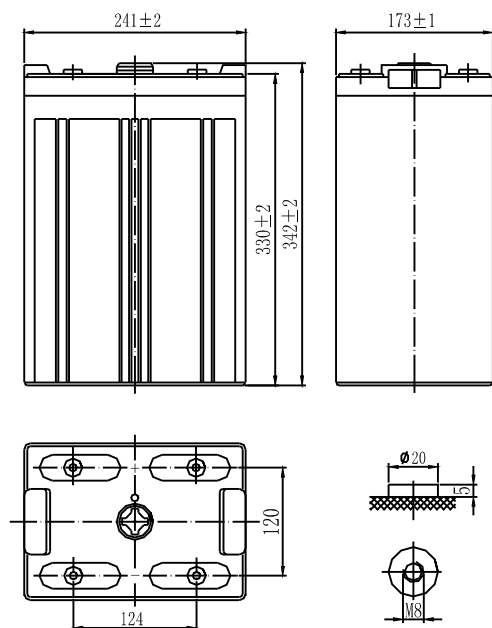
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

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)	242 / 9.53
Width(mm / inch)	173 / 6.81
Height(mm / inch)	330 / 12.99
Total Height(mm / inch)	365 / 14.37
Approx. Weight(Kg / lbs)	31.9 / 70.3



Total height with removeable cover: 365

Performance Characteristics

Nominal Voltage	2V
Number of cell	1
Design Life	20 years
Nominal Capacity 77°F(25°C)	
10 hour rate (50A, 1.8V)	500Ah
5 hour rate (88.2A, 1.75V)	441Ah
1 hour rate (294A, 1.6V)	294Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	0.38mOhms
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)	2500A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.30-2.35VPC
Maximum charging current	100A
Temperature compensation	-5.0mV/°C
Standby use	2.23-2.27VPC
Temperature compensation	-3.3mV/°C

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

End point Volts/cell	10min	15min	30min	45min	60min	2h	3h	5h	10h
1.60V	918	697	495	375	294	175	135	94.7	52.8
1.65V	870	663	472	361	284	170	131	92.8	52.0
1.70V	820	629	451	345	272	163	126	90.7	51.2
1.75V	769	594	426	328	261	156	122	88.2	50.2
1.80V	718	559	403	311	248	149	116	84.8	50.0

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

End point Volts/cell	10min	15min	30min	45min	60min	2h	3h	5h	10h
1.60V	1515	1200	911	756	613	370	265	185	101
1.65V	1428	1138	865	721	587	354	255	179	99
1.70V	1339	1075	819	685	561	338	242	172	97.7
1.75V	1250	1013	771	648	532	323	231	166	95.8
1.80V	1163	950	723	611	504	298	213	160	94.1

(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.



