

SG2-400 2V 400Ah(10hr)

Gel battery shows some distinctive advantages over flooded battery or AGM battery, such as super thermal stability, high deep discharge capability, good recovery from deep discharge, even if the battery is left discharged for three days, it will recover to 100% of capacity. With the above-mentioned advantages, the gel battery has long service life, specially suitable for motive power applications, such as golf trailer, sruubber, folklift, etc. The deep discharge cycles increased 50% as compared with the AGM battery.

Battery Construction

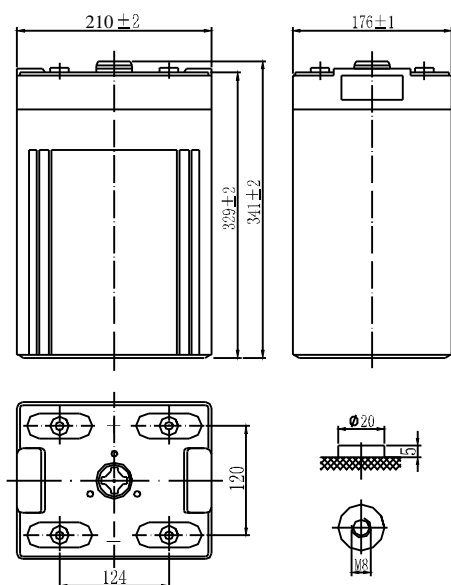
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	PVC	Gelled acid

General Features

- Nanometer SiO₂ and H₂SO₄ gelled electrolyte technology for efficiency 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 restardant ABS.

Dimensions and Weight

Length(mm / inch) 210 / 8.27
 Width(mm / inch) 176 / 6.93
 Height(mm / inch) 330 / 13.0
 Total Height(mm / inch) 367 / 14.5
 Approx. Weight(Kg / lbs) 27 / 59.5



Total height with removeable cover: 367

Performance Characteristics

Nominal Voltage	2V
Number of cell	1
Design Life	20 years
Nominal Capacity 77°F(25°C)	
10 hour rate (40.0A, 10.8V)	400Ah
5 hour rate (68A, 10.5V)	340Ah
1 hour rate (248A, 9.6V)	248Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	0.7mOhms
Self-Discharge	
2% 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)	1600A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use Charge Voltage:	2.40V-2.45V
Maximum charging current	80A
Temperature compensation	-5mV/°C
Standby use	2.25V-2.30V
No charge current limit is required	
Temperature compensation	-3.3mV/°C

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

End point volts/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	750	630	410	248	112	74.0	42.0	22.4
1.65V	725	605	398	240	109	72.0	41.6	22.0
1.70V	698	580	384	232	106	70.0	40.8	21.6
1.75V	670	555	366	224	103	68.0	40.4	21.4
1.80V	640	530	350	212	100	65.6	40.0	21.0

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

End point volts/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	1230	1050	749	464	195	138	80.0	43.2
1.65V	1180	1005	715	442	190	134	79.0	42.5
1.70V	1130	955	682	423	185	130	77.8	41.7
1.75V	1075	905	662	409	179	126	76.4	41.0
1.80V	1020	850	634	390	173	121	75.0	40.2

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

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