

SV12500



FEATURES

- AGM maintenance-free lead-acid battery
- High-efficiency lead-calcium plates
- Construction of fiber-glass separators stabilizes temperature of electrolyte
- High-quality insulation of plates
- Safe system of internal pressure regulating valves
- Reduced self-discharge current
- Sealed construction
- Long cycle life both in float and cycle charge modes
- Quality of products is guaranteed by the control of the manufacturing process in accordance with the standards

SPECIFICATION

Nominal Voltage	12 V	
Nominal Capacity	50 A·h at 20Hr-rate to 1.75V/cell	
Approx. Weight	16.0 Kg	
Number of cells in battery	6	
Internal Resistance	8.4 mΩ (Fully Charged) at 25 °C	
Self-Discharge	Average 3% of capacity declined per month at 25 °C	
Operating Temp. Range	Discharge: -20 °C ~ 50 °C	
	Charge: -15 °C ~ 40 °C	
	Storage: -20 °C ~ 40 °C	
Max. Discharge Current	500 A (5 sec.)	
Capacity Affected by Temp.	40 °C	102%
	25 °C	100%
	0 °C	85%
	-15 °C	65%
Container Material	ABS plastic	

APPLICATION

**All Purpose
UPS
Signal Light
Alarm and Security System
DC Power Supply
Auto Control System**

APPLICABLE STANDARDS

**IEC60896-21/22
JIS C8704
GB/T19638**



CHARGE PROCEDURE

Application	Constant Voltage Charge (V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25 °C	2.375	2.35~2.4	0.3C
Standby Use	25 °C	2.275	2.25~2.30	

DISCHARGE CURRENT VS. DISCHARGE VOLTAGE

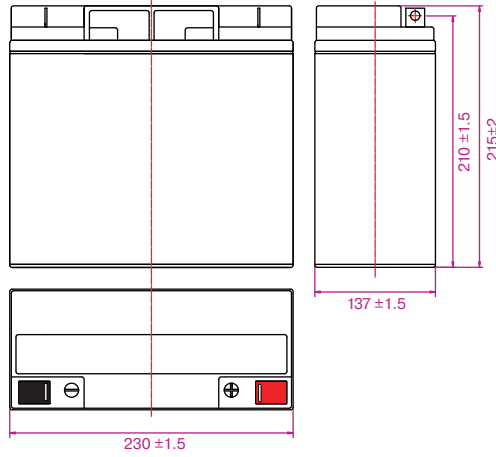
Final Discharge Voltage (V/cell)	1.75	1.70	1.60
Discharge Current (A)	0.2C > (A)	0.2C < (A) < 1C	(A) > 1C

Note: Temp. Compensation Coefficient of Charge Voltage,
Cycle use: -4mV/°C/cell, Standby Use: -3 mV/°C/cell

OUTER DIMENSION

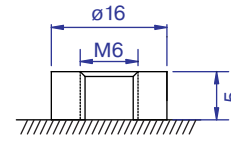
- Length
230 ± 1.5
- Width
137 ± 1.5
- Height
210 ± 1.5
- Total height
215 ± 2.0

Unit: mm



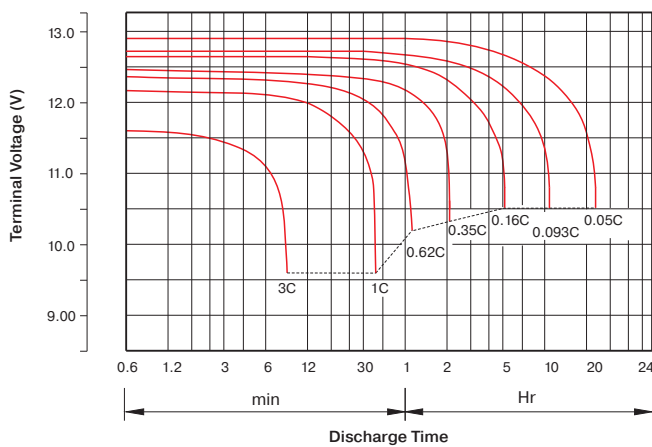
Terminal Type

- Terminal B4

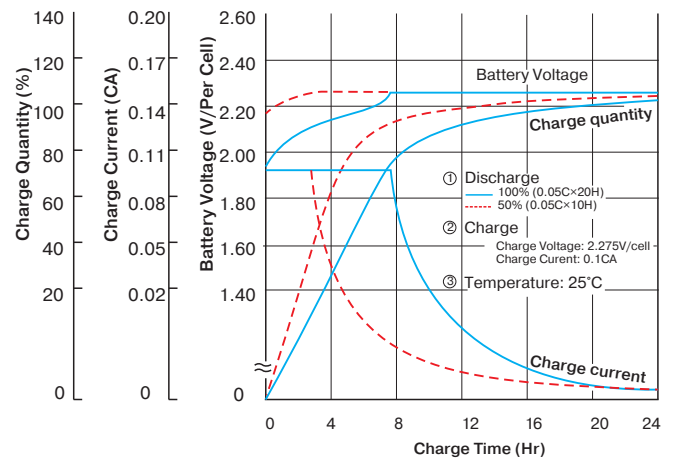


M6 Bolt

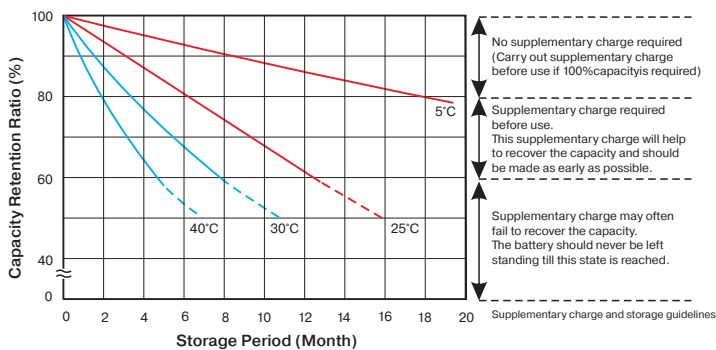
Discharge Characteristics at 25 °C



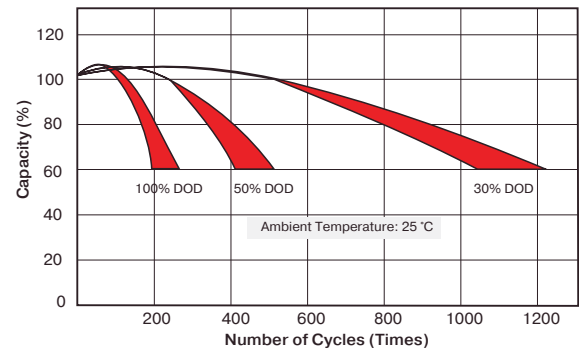
Charge Characteristics (Standby Use)



Capacity Retention Characteristics



Cycle Service Life



Constant Current (CC, Unit: A) & Constant Power (CP, Unit: W) Discharge Table at 25 °C

F.V. (V/cell)	Time Model	5 Min	10 Min	15 Min	30 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	8 Hr	10 Hr	20 Hr
		1.60	CC(A)	159	121	92	57	31	18.8	13.6	10.9	8.6	6.21
	CP(W)	1775	1355	1053	664	363	222	162	131	102.5	72.1	58.5	32.5
1.70	CC(A)	142	115	88	55	30	18.6	13.2	10.7	8.3	6.11	5.10	2.65
	CP(W)	1584	1289	1011	643	351	220	157	127	99.3	71.2	57.5	31.5
1.75	CC(A)	133	112	86	54	30	18.4	13.2	10.7	8.3	6.06	5.05	2.60
	CP(W)	1482	1253	984	632	349	218	157	127	99.3	70.6	57.0	31.0
1.80	CC(A)	130	103	82	53	29	17.2	12.6	10.4	8.2	5.96	5.00	2.50
	CP(W)	1445	1150	942	616	325	204	150	124	97.8	69.0	56.6	30.0
1.85	CC(A)	105	80	67	49	28	16.7	12.0	9.9	8.1	5.71	4.90	2.42
	CP(W)	1012	788	723	526	336	192	138	114	93.9	66.6	55.1	28.8

Note: The above data are average values, and can be obtained with 3 charge/discharge cycles.