

# SV12170

## 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	17 A·h at 20Hr-rate to 1.75V/cell		
Approx. Weight	5.0 Kg		
Number of cells in battery	6		
Internal Resistance	15 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	225 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

**IEC61056-1/2  
JIS C8702-2003  
GB/T19639.1-2005**



## CHARGE PROCEDURE

Application	Constant Voltage Charge (V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25 °C	2.425	2.40~2.45	0.3C
Standby Use	25 °C	2.275	2.25~2.30	

## DISCHARGE CURRENT VS. DISCHARGE VOLTAGE

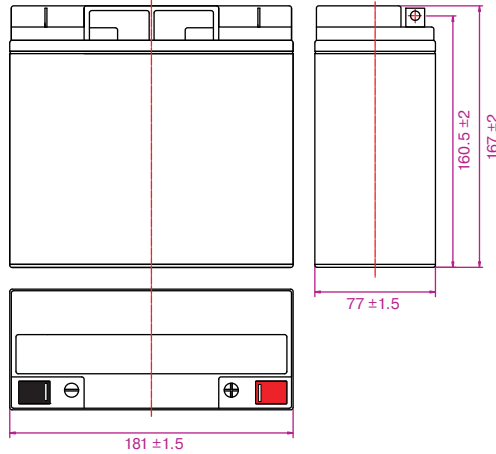
Final Discharge Voltage (V/cell)	1.75	1.70	1.60
Discharge Current (A)	0.2C > (A)	0.2C < (A) < 1C	(A) > 1C

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

## OUTER DIMENSION

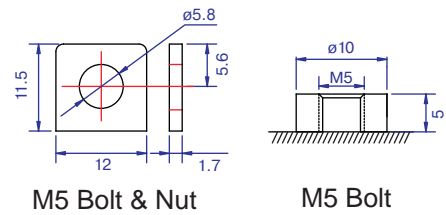
- Length  
181 ± 1.5
- Width  
77 ± 1.5
- Height  
160.5 ± 2.0
- Total height  
167 ± 2.0

Unit: mm

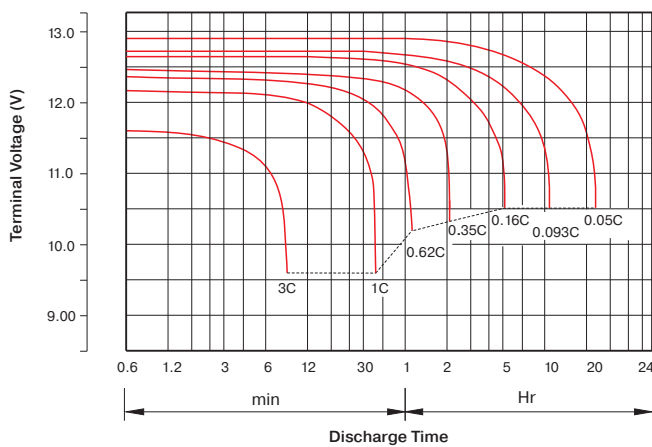


## Terminal Type

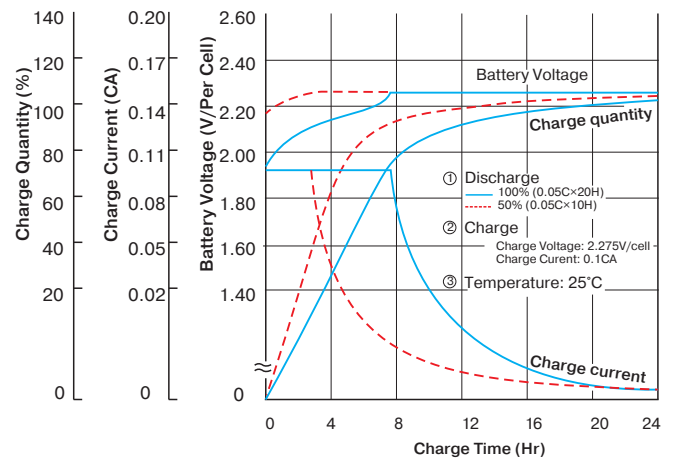
- Terminal T1
- Terminal B1



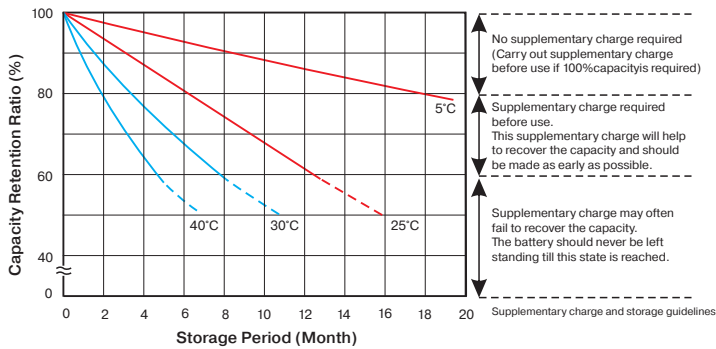
## Discharge Characteristics at 25 °C



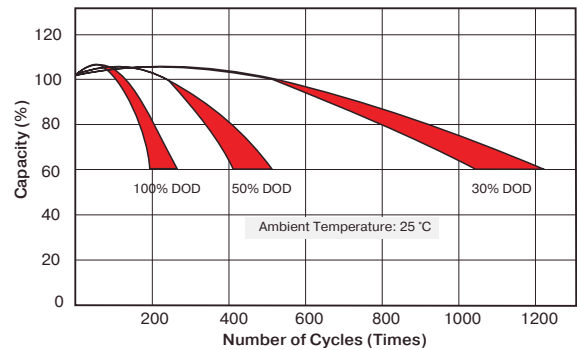
## Charge Characteristics (Standby Use)



## 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)	61.2	40.1	29.8	19.6	10.2	5.95	4.38	3.51	2.98	1.97
	CP(W)	722	453	343	208	118	68.9	50.65	40.66	34.50	22.74	18.63	10.20
1.70	CC(A)	56.1	38.4	27.3	18.6	9.6	5.71	4.25	3.40	2.93	1.93	1.58	0.86
	CP(W)	679	429	322	206	111	66.1	49.23	39.38	33.86	22.38	18.28	9.92
1.75	CC(A)	51.1	35.9	25.5	18.0	9.3	5.60	4.18	3.23	2.91	1.91	1.56	0.85
	CP(W)	656	417	308	204	107	64.8	48.38	37.40	33.65	22.17	18.13	9.85
1.80	CC(A)	49.1	34.3	23.8	17.5	9.0	5.45	4.11	3.17	2.76	1.86	1.52	0.83
	CP(W)	575	404	297	203	104	63.5	47.81	36.94	32.16	21.25	17.71	9.63
1.85	CC(A)	45.4	32.3	22.1	17.0	8.6	5.31	3.90	3.12	2.64	1.81	1.49	0.81
	CP(W)	556	390	283	202	103	63.0	46.40	36.83	31.45	20.54	17.35	9.56

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