SB BATTERY

VRLA GEL RECHARGEABLE BATTERY
SPG18-12 *12V18Ah*

FOR HIGH RATE USE

General Features

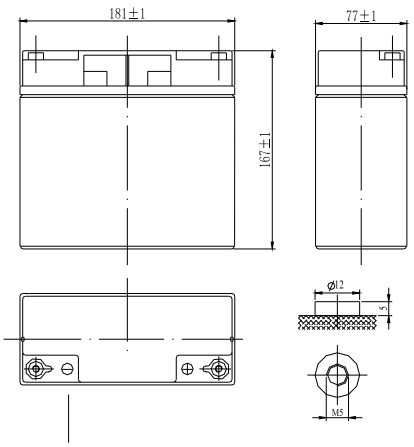
- Silica gel technology for longer cycle life and better performance at cold ambient temperatures.
- Special sheet separator and colloidal or foamed silica.
- Deep discharge cycle increased by 50% as compared with the AGM battery.
- High reliability and quality.
- Excellent recovery from deep discharge.
- Living up prevailing standards.

Specification

Nominal Voltage	12V
Number of cell	6
Design Life	8 Years
Nominal Capacity 77ºF(25ºC)	
20 hour rate (0.9A, 10.5V)	18Ah
10 hour rate (1.78A, 10.5V)	17.8Ah
5 hour rate (3.19A,10.5V)	15.94Ah
1 hour rate (12.71A,9.6V)	12.71Ah
Internal Resistance	
Fully Charged battery 77ºF(25ºC)	16mOhms
Self-Discharge	
3% of capacity declined per month at 20ºC(average)	
Operating Temperature Range	
Discharge	-20~60ºC
Charge	-10~60ºC
Storage	-20~60ºC
Max. Discharge Current 77ºF(25ºC)	270A(5s)
Short Circuit Current	900A
Charge Methods: Constant Voltage Charge 77ºF(25ºC)	
Cycle use	14.5-14.9V
Maximum charging current	5.4A
Temperature compensation	-30mV/ºC
Standby use	13.6-13.8V
Temperature compensation	-20mV/ºC

Dimensions and Weight

Length(mm / inch)	181 / 7.13
Width(mm / inch)	77 / 3.03
Height(mm / inch)	167 / 6.57
Total Height(mm / inch)	167 / 6.57
Approx. Weight(Kg / lbs)	5.7 / 12.6
Standard Terminal	B1

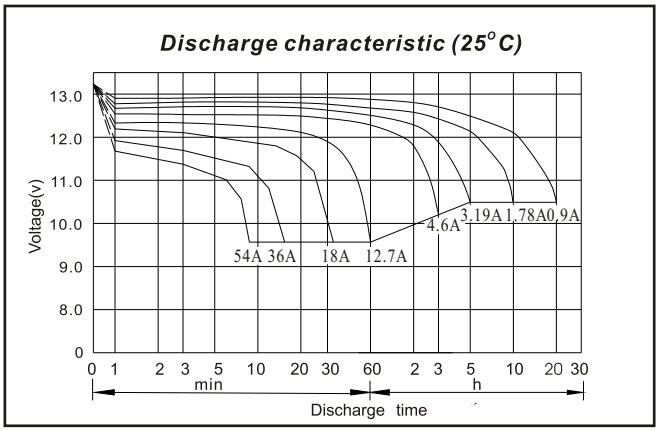


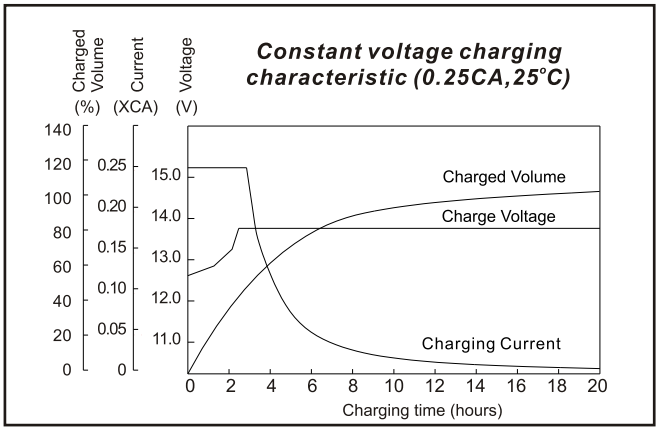
Discharge Constant Current (Amperes at 77ºF25ºC)

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	67.0	45.3	36.0	20.0	12.0	4.58	3.19	1.78	0.95
1.65V	64.9	44.2	35.1	19.6	11.8	4.51	3.13	1.75	0.94
1.70V	62.6	43.1	34.2	19.1	11.6	4.43	3.07	1.72	0.92
1.75V	60.1	41.9	33.3	18.7	11.4	4.36	3.01	1.68	0.90
1.80V	57.4	40.8	32.4	18.2	11.2	4.28	2.93	1.65	0.89

Discharge Constant Power (Watts at 77ºF25ºC)

End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	131	83.6	67.3	38.3	29.4	23.4	13.1	9.10	6.16
1.65V	127	82.2	66.2	37.8	29.1	23.2	13.0	9.01	6.09
1.70V	123	80.8	65.0	37.2	28.7	23.0	12.8	8.92	6.01
1.75V	118	79.3	63.9	36.7	28.4	22.7	12.7	8.83	5.94
1.80V	114	77.9	62.7	36.1	28.0	22.5	12.5	8.74	5.92





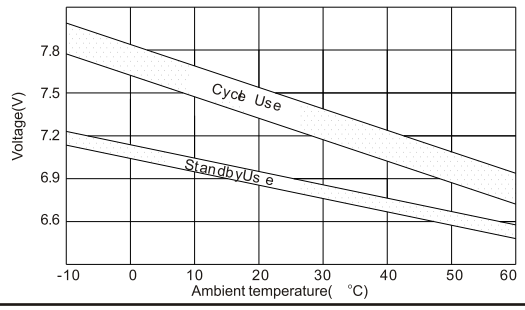
SB BATTERY

VRLA GEL RECHARGEABLE BATTERY

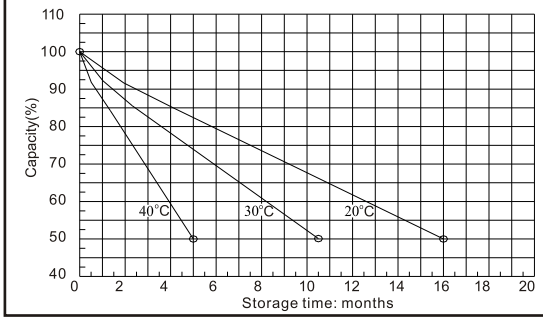
SPG18-12 *12V18Ah*

FOR HIGH RATE USE

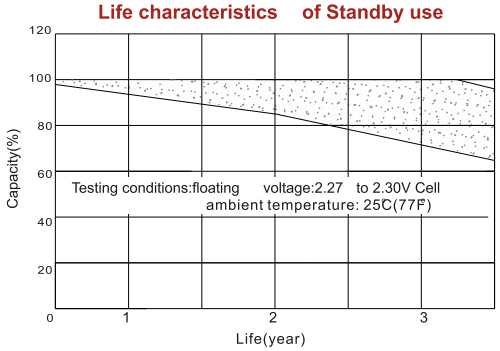
Relationship between charging voltage and temperature



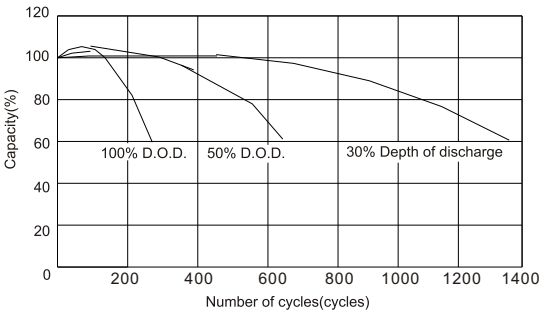
Self-discharge characteristic



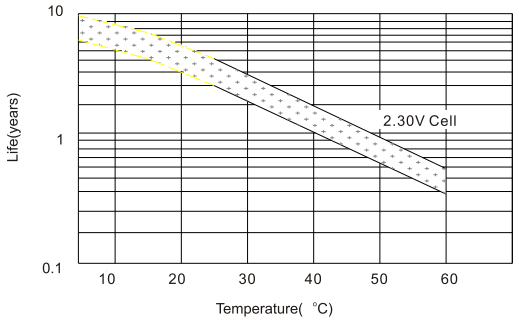
Life characteristics of Standby use



Cycle service life in relation to depth of discharge



Temperature effects on float life



Temperature effects on capacity