



SB12-40 (12V40Ah)

Specification Sheet General Series

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	40Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 12.2 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 8.7 mΩ
Terminal	F11(M6)
Max. Discharge Current	400A (5 sec)
Short Circuit Current	900A
Design Life	12 years (Float charging)
Recommended Maximum Charging Current	10A
Reference Capacity	C3 31.0AH C5 34.5AH C10 40.0AH C20 42.0AH
Standby Use Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



Dimensions

Length	198±2mm (7.80 inches)
Width	166±2mm (6.54 inches)
Height	169±2mm (6.65 inches)
Total Height	169±2mm (6.65 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics : A (25°C)

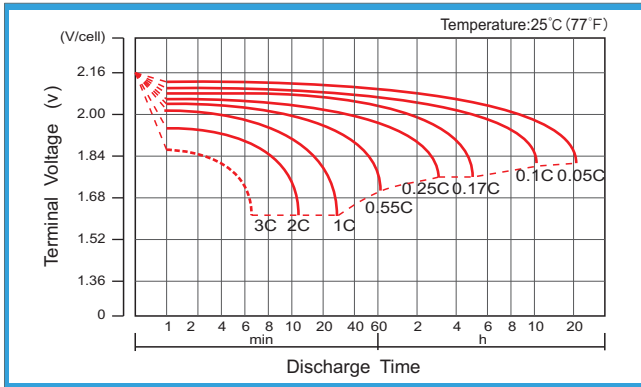
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	132.1	94.4	71.8	41.5	24.9	14.9	10.9	8.89	7.50	5.01	4.26	2.19
1.65V	127.3	91.6	69.9	40.6	24.4	14.7	10.8	8.78	7.40	4.96	4.22	2.17
1.70V	121.1	87.9	67.4	39.4	23.8	14.4	10.6	8.63	7.20	4.90	4.17	2.15
1.75V	113.1	83.1	64.2	37.9	23.0	14.0	10.3	8.44	6.90	4.81	4.10	2.10
1.80V	103.1	77.0	60.1	35.8	22.0	13.5	9.80	8.18	6.80	4.69	4.00	1.95
1.85V	90.7	69.4	54.8	33.2	20.6	12.9	9.57	7.84	6.68	4.53	3.73	1.90

Constant Power Discharge Characteristics : WPC (25°C)

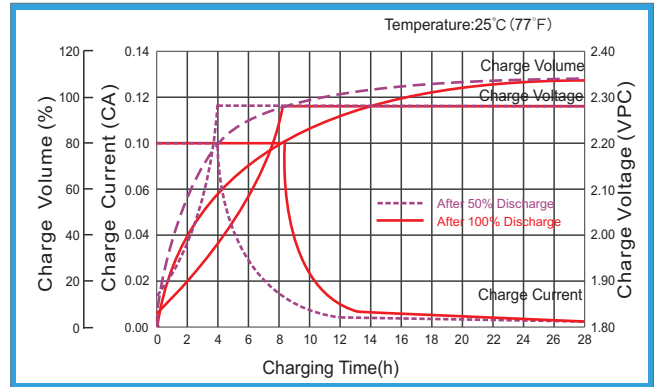
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	227.3	162.8	127.4	76.6	47.2	28.7	21.2	17.3	14.7	9.94	8.51	4.37
1.65V	224.9	162.1	126.7	76.0	46.8	28.5	21.1	17.2	14.6	9.87	8.44	4.34
1.70V	216.3	157.4	123.3	74.2	45.8	28.0	20.7	16.9	14.4	9.75	8.34	4.30
1.75V	205.7	151.5	119.1	72.0	44.5	27.4	20.3	16.6	14.1	9.59	8.21	4.24
1.80V	190.7	142.8	113.0	68.7	42.7	26.5	19.7	16.2	13.8	9.37	8.03	4.17
1.85V	170.8	131.0	104.6	64.4	40.3	25.4	18.9	15.6	13.3	9.08	7.79	4.06

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

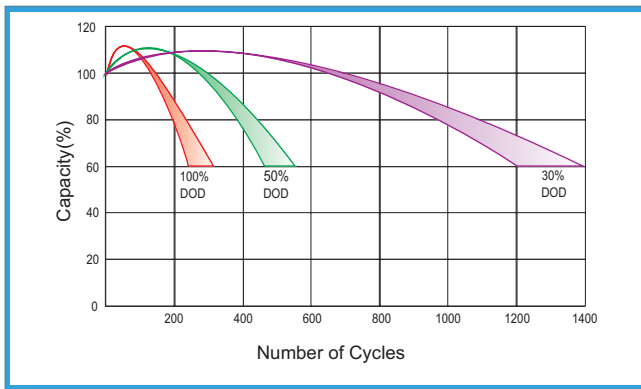
Discharge Characteristics Curve



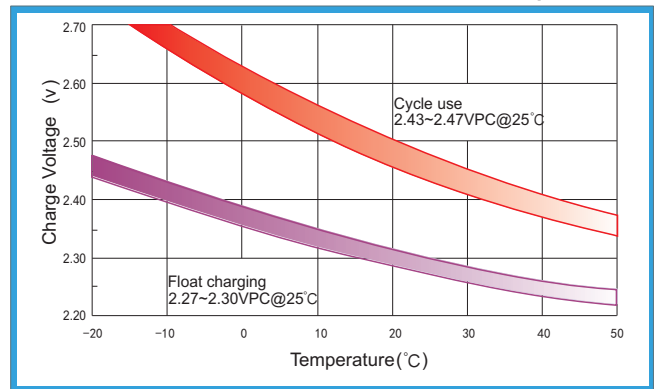
Charge Characteristic Curve For Standby Use



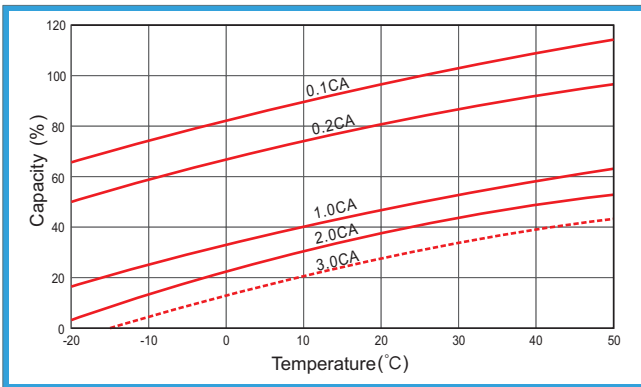
Cycle Life In Relation To Depth Of Discharge



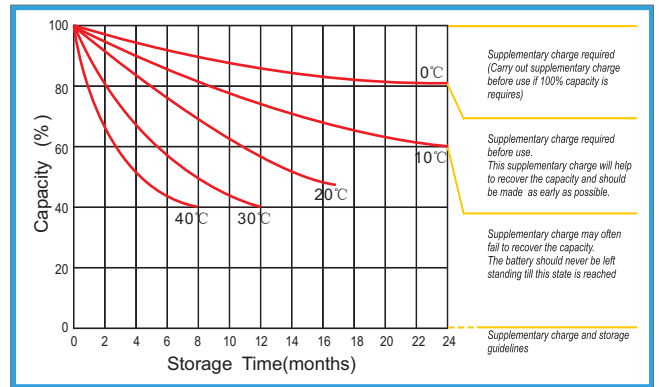
Relationship Between Charging Voltage And Temperature



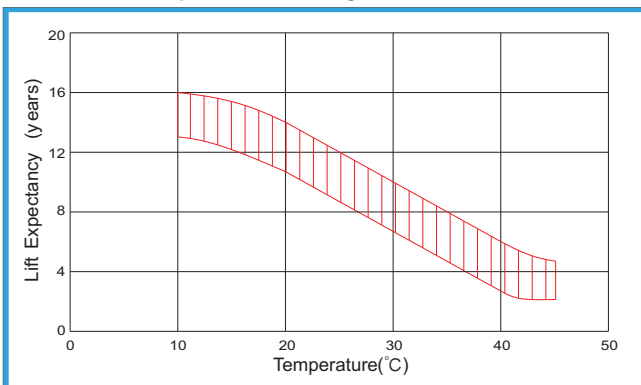
Temperature Effects On Capacity



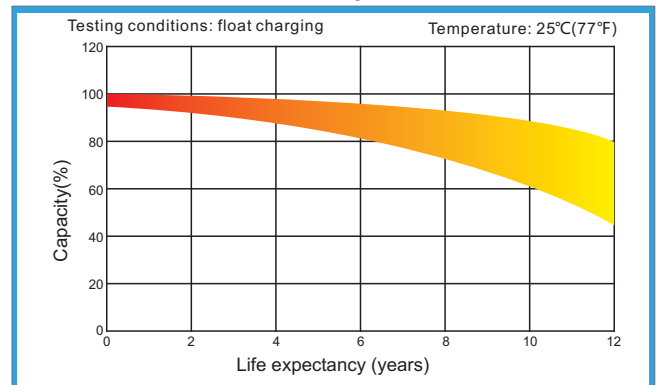
Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



(Note) All above information shall be changed without prior notice, AxiWin reserves the right to explain and update the latest information