SL12-100B (12V 100Ah)

SL12-100B Deep Cycle battery provides superior high integrity and reliability. It is specially designed for frequent cycling charge and discharge. By using strong grids, thick plate and special active material are designed for repeated deep-discharge applications. It is designed for up to 10 years in standby service or more than 260 cycles at 100% discharge in cycle service.

Battery case: Flame-retardant

MH27774-1

CTK20141222018

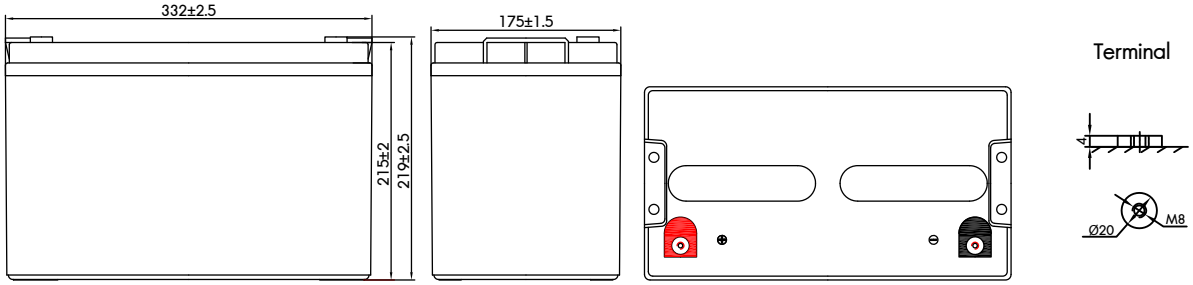
Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah @10hr-rate to 1.8V per cell @25°C
Weight	Approx. 30.2 kg
Max. Discharge Current	1000A (5sec)
Internal Resistance	Approx. 4.5mΩ
Operating Temperature Range	Discharge: -15°C~50°C Charge: -15°C~40°C Storage: -15°C~40°C
Nominal Operating Temperature Range	25°C±3°C
Float Charging Voltage	13.5 to 13.8VDC per unit @25°C
Recommended Max. Charging Current Limit	30A
Equalization and Cycle Service	14.4 to 14.8VDC per unit @25°C
Self Discharge	Battery can be stored for more than 6 months at 25°C, self-discharge rate less than 3% per month. Charging before use is recommended. For higher temperature, the time interval will be shorter.
Terminal	Thread lead alloy recessed terminal to accept M8 bolt
Container Material	Flammability resistance of UL94-V0

Dimension

Dimension: 332 (L) x 175 (W) x 215 (H) x 219 (TH)

Unit: mm



Constant Current Discharge Characteristics : A (25°C)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	105.6	77.6	63.9	26.9	18.1	12.37	10.26	5.47
1.67V	103.7	76.2	63.0	26.7	18.0	12.34	10.24	5.46
1.70V	102.2	75.4	62.2	26.5	17.9	12.31	10.23	5.44
1.75V	98.7	73.3	60.3	26.0	17.7	12.20	10.17	5.39
1.80V	94.1	70.7	57.7	25.0	17.2	11.98	10.01	5.31
1.85V	88.0	67.2	53.5	23.0	16.0	11.43	9.62	5.13

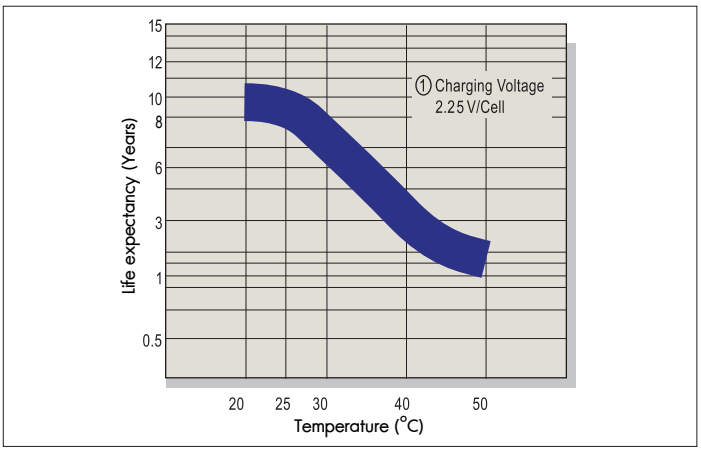
Constant Current Discharge Characteristics : W/Cell (25°C)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	174.4	130.1	108.7	50.4	35.4	24.17	20.19	10.77
1.67V	169.7	126.6	107.3	49.9	35.3	24.05	20.15	10.71
1.70V	164.6	123.9	106.4	49.5	35.2	24.00	20.10	10.68
1.75V	155.4	117.8	103.8	48.6	34.8	23.80	19.93	10.58
1.80V	143.9	109.9	101.1	46.9	33.8	23.38	19.62	10.45
1.85V	128.6	99.0	95.2	43.5	31.8	22.58	19.02	10.15

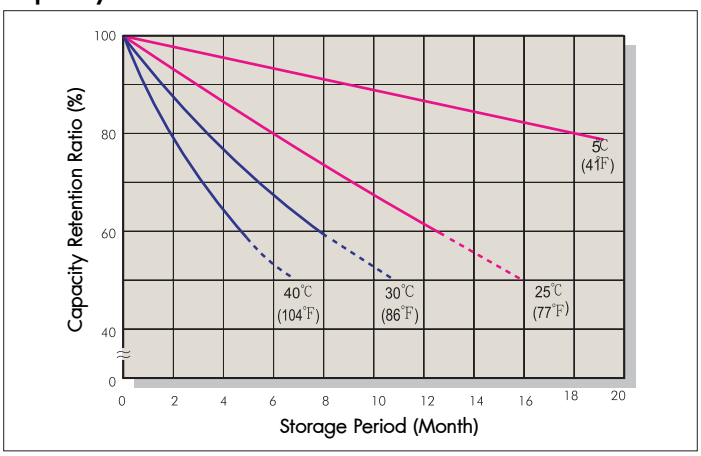
All mentioned values are average values

SL12-100B (12V 100Ah)

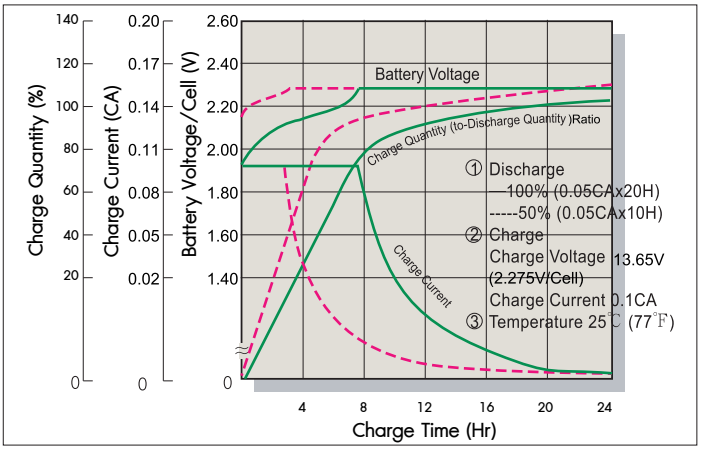
Trickle (or Float) Design Life



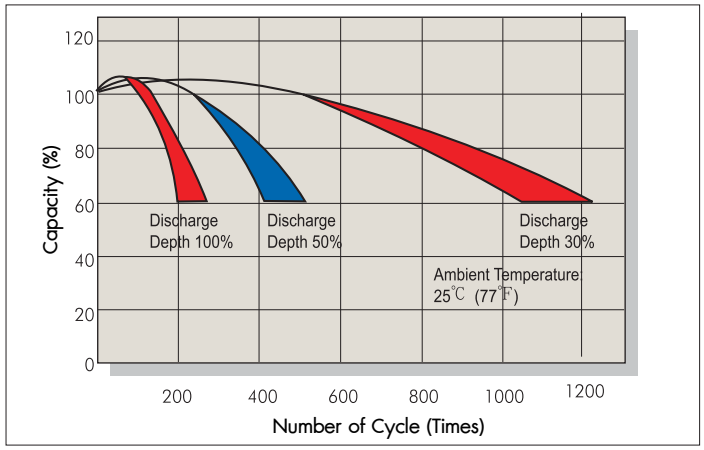
Capacity Retention Characteristic



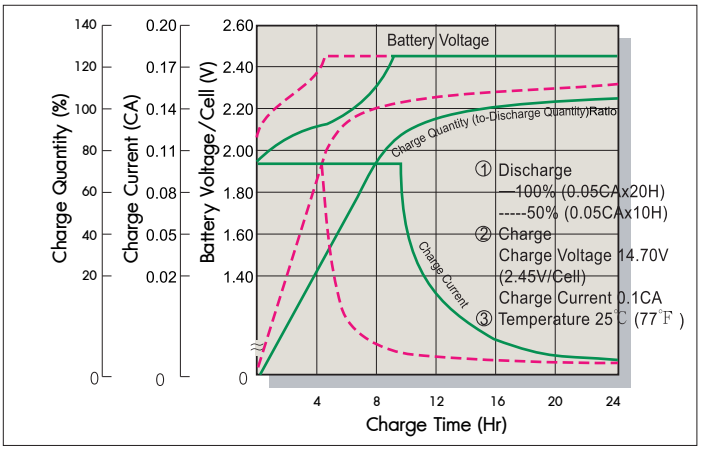
Battery Voltage and Charge Time for Standby Use



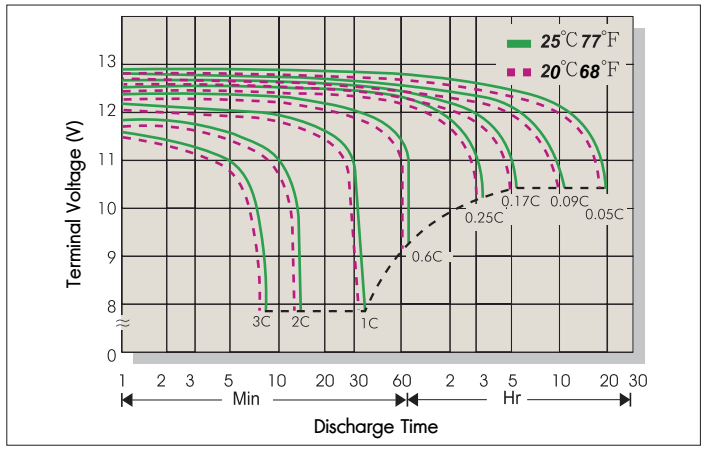
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage and Discharge Time



Charging Procedures

Application	Charge Voltage (V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C	25°C	2.40~2.50	0.3C
Standby Use	25°C	25°C	2.25~2.30	

Discharge Current VS Discharge Voltage

Final Discharge Voltage (V/cell)	1.75	1.7	1.65	1.6
Discharge Current (A)	0.2C>(A)	0.2C<(A)<0.5C	0.2C<(A)<1C	(A)>1C

Effect of Temperature on Capacity (20HR)

Temperature	Dependency of Capacity (20HR)
40°C	102%
25°C	100%
0°C	85%
-15°C	65%

Self-discharge Characteristics

Charge Voltage (V/cell)	Preservation Rate
3 months	91%
6 months	82%
9 months	64%