

SLA BATTERY—DEEP CYCLE SERIES
Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	33Ah@20hr-rate (1.65A to 1.80V/cell @25°C)
Weight	Approx. 10.3Kg
Terminal	M6, Φ=14
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	33.0Ah 20hr-rate (1.65A to 1.75V/cell @25°C)
	32.9Ah 10hr-rate (3.29A to 1.75V/cell @25°C)
	18.2Ah 1hr-rate (18.2A to 1.75V/cell @25°C)
	16.5Ah 0.5hr-rate (33.0A to 1.60V/cell @25°C)
Max. Discharge Current	396A(5sec)
Internal Resistance	Approx. 7.5 mΩ(Fully charged)
Operating Temp. Range	Discharge: -20°C~55°C
	Charge : -20°C~40°C
	Storage : -15°C~50°C
Cycle Use	Charging Current: ≤9.9A
	Voltage: 14.6V~14.8V
	Temperature compensation: -30mV/°C
Standby Use	Charging Current: No limit
	Voltage: 13.6V~13.8V
	Temperature compensation: -20mV/°C
Self-Discharge	less than 3% at 25°C
Design Life	12 years (floating charge)


Introduction

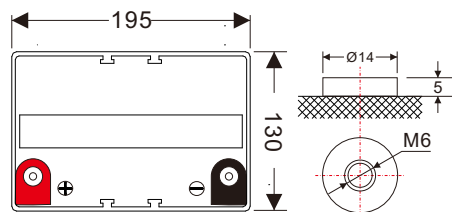
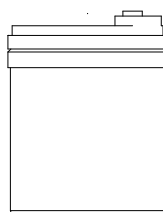
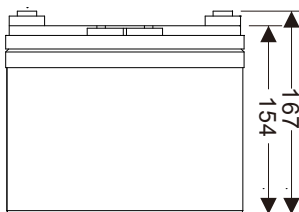
The MOTOMA deep cycle Series batteries with 12 years or more floating life which are designed for deep discharge application, it use the special chemical formula for plates, active paste material, slightly stronger electrolyte and low temperature design, which can withstand repeated deep cyclic application. The deep discharge cycles of deep cycle batteries can be more than 30% compared with other normal AGM batteries.

Applications

- ◆ Auto control system & ATM machine
- ◆ Electronic apparatus and equipment
- ◆ Emergency light & Emergency backup power supply & Alarm/Security system
- ◆ Power generation system (solar and wind power system, etc.)
- ◆ Communication power & DC power
- ◆ Electric Power System (EPS)
- ◆ Uninterruptable Power System (UPS)
- ◆

Dimensions

Length	195±1mm (7.68 inches)
Width	130±1mm (5.12 inches)
Height	154±1mm (6.06 inches)
Total Height	167±1mm (6.57 inches)



Unit: mm

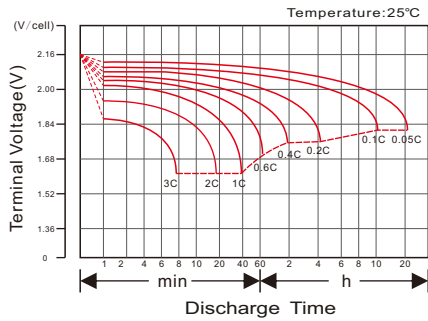
Constant Current Discharge Characteristics: A (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	102.5	73.4	58.2	36.5	21.3	11.87	8.53	7.06	5.78	4.06	3.42	1.811
1.65V/cell	99.8	69.9	57.0	35.9	21.2	11.78	8.50	7.03	5.75	4.03	3.39	1.778
1.70V/cell	94.0	67.4	56.1	35.6	21.0	11.69	8.44	7.00	5.71	4.00	3.36	1.745
1.75V/cell	84.4	62.2	53.4	34.7	20.8	11.61	8.40	6.93	5.65	3.96	3.33	1.712
1.80V/cell	78.5	56.7	49.2	33.1	20.3	11.40	8.18	6.77	5.54	3.90	3.29	1.679
1.85V/cell	68.4	50.7	44.1	31.1	19.3	10.89	7.82	6.44	5.31	3.73	3.19	1.580

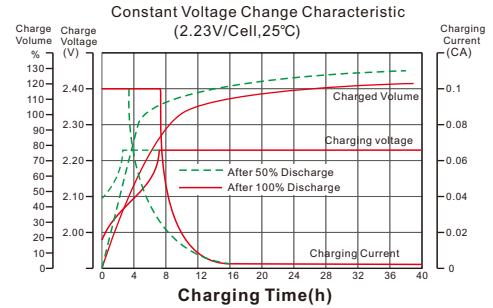
Constant Power Discharge Characteristics: W (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	976	736	613.3	403.2	243.1	136.6	98.5	81.6	66.9	47.13	38.62	20.40
1.65V/cell	956	703	600.5	398.1	241.9	136.0	98.3	81.4	66.5	46.94	38.22	20.20
1.70V/cell	903	679	592.4	393.5	240.1	134.8	97.7	81.0	66.3	46.54	38.02	20.00
1.75V/cell	813	628	564.8	384.5	237.8	133.5	97.1	80.4	65.7	46.14	37.63	19.80
1.80V/cell	754	570	519.0	367.0	231.9	131.6	94.8	78.3	64.7	45.15	37.23	19.61
1.85V/cell	651	506	463.4	343.9	219.7	125.5	90.1	74.6	61.4	43.57	36.04	18.81

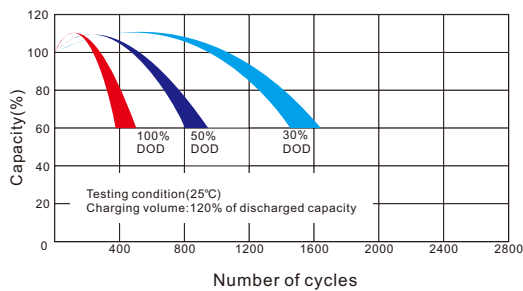
Discharge Characteristics Curve



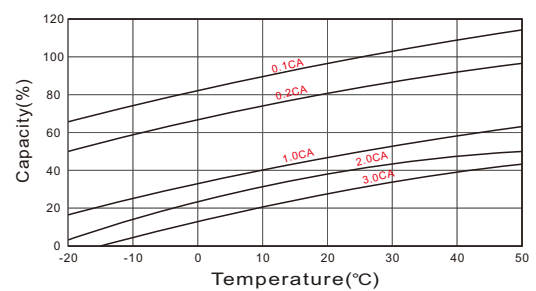
Charging Characteristics Curve



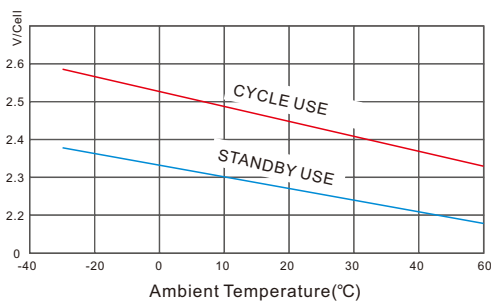
Cycle life in relation to depth of Discharge



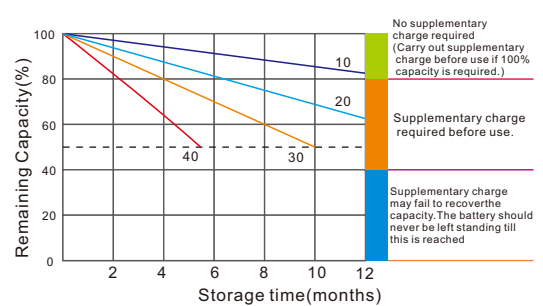
Temperature effects on Capacity



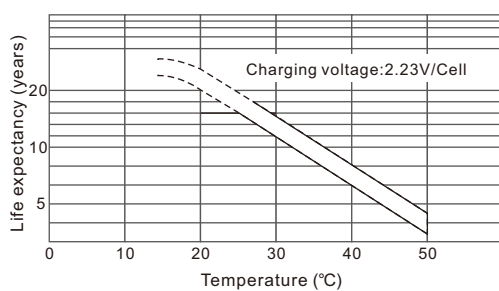
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

