

SLA BATTERY—DEEP CYCLE SERIES

Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	40Ah@20hr-rate (1.65A to 1.80V/cell @25°C)
Weight	Approx.13.5Kg
Terminal	M6,Φ=14
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	40.2Ah 20hr-rate (2.01A to 1.80V/cell @25°C)
	39.4Ah 10hr-rate (3.94A to 1.80V/cell @25°C)
	33.7Ah 5hr-rate (6.73A to 1.75V/cell @25°C)
	25.4Ah 1hr-rate (25.4A to 1.60V/cell @25°C)
Max. Discharge Current	400A(5sec)
Internal Resistance	Approx.9 mΩ(Fully charged)
Operating Temp. Range	Discharge: -20°C~50°C
	Charge : -10°C~50°C
	Storage : -10°C~40°C
Cycle Use	Charging Current: ≤12A
	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

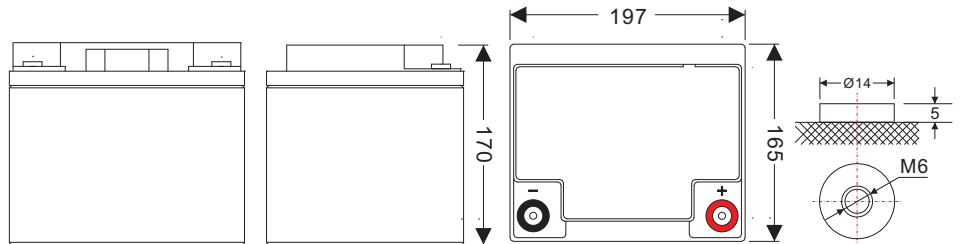
The MOTOMA deep cycle Series batteries with 12 years or more floating life which are designed for deep discharge application, it use the special chemical formula for plates, active paste material, slightly stronger electrolyte and low temperature design, which can withstand repeated deep cyclic application. 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	197±1mm (7.76 inches)
Width	165±1mm (6.50 inches)
Height	172±1mm (6.69 inches)
Total Height	172±1mm (6.69 inches)



Unit: mm

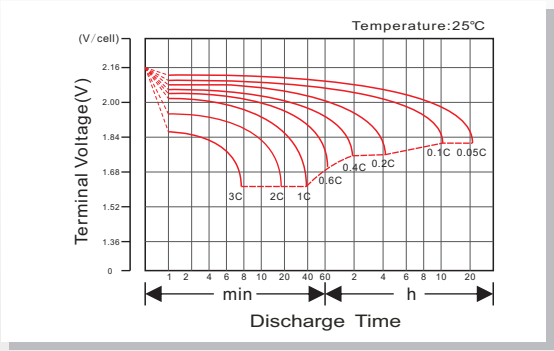
Constant Current Discharge Characteristics: A (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	122.2	87.6	69.4	43.5	25.4	14.16	10.18	8.42	6.90	4.84	4.10	2.17
1.65V/cell	119.0	83.3	67.9	42.8	25.2	14.05	10.14	8.39	6.85	4.81	4.06	2.13
1.70V/cell	112.1	80.4	66.9	42.4	25.0	13.95	10.06	8.35	6.81	4.77	4.02	2.09
1.75V/cell	100.7	74.2	63.7	41.3	24.8	13.84	10.02	8.27	6.73	4.73	3.98	2.05
1.80V/cell	93.7	67.7	58.7	39.5	24.2	13.59	9.75	8.07	6.61	4.65	3.94	2.01
1.85V/cell	81.5	60.5	52.6	37.0	23.0	12.99	9.32	7.68	6.33	4.45	3.82	1.89

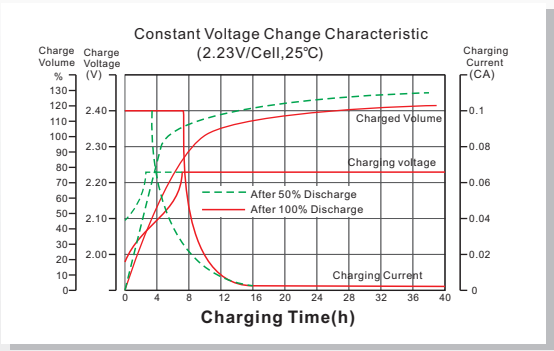
Constant Power Discharge Characteristics: W (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	1164	878	731.4	480.8	289.9	162.9	117.5	97.3	79.8	56.22	46.06	24.33
1.65V/cell	1140	838	716.2	474.8	288.5	162.3	117.2	97.1	79.3	55.98	45.59	24.09
1.70V/cell	1077	810	706.5	469.3	286.4	160.8	116.5	96.6	79.1	55.51	45.35	23.86
1.75V/cell	969	749	673.7	458.6	283.6	159.3	115.8	95.9	78.4	55.03	44.88	23.62
1.80V/cell	899	680	619.0	437.7	276.6	156.9	113.0	93.4	77.1	53.85	44.41	23.38
1.85V/cell	776	604	552.7	410.1	262.1	149.7	107.4	88.9	73.3	51.96	42.99	22.44

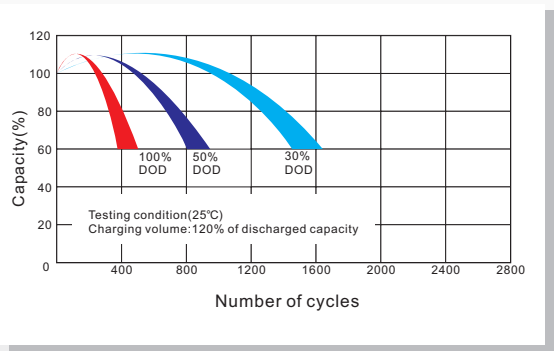
Discharge Characteristics Curve



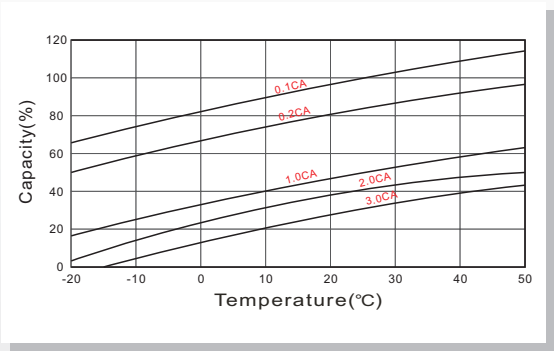
Charging Characteristics Curve



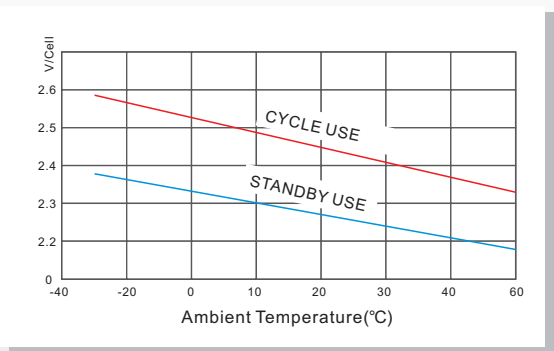
Cycle life in relation to depth of Discharge



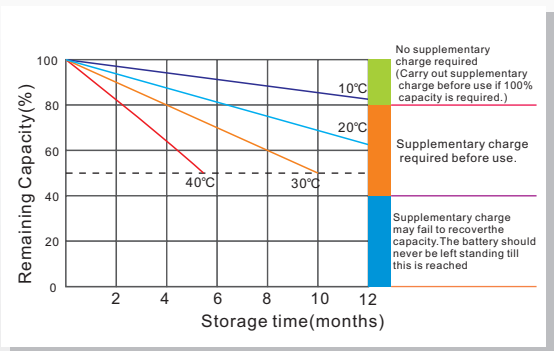
Temperature effects on Capacity



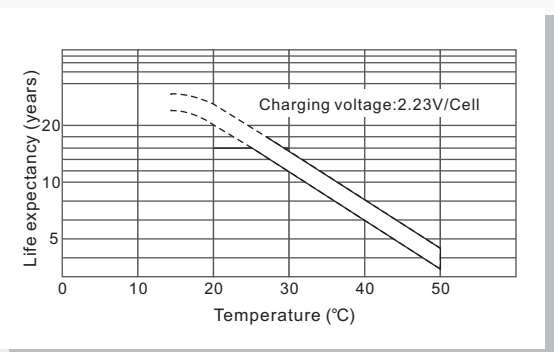
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

