

SLA BATTERY—STANDARD SERIES

**Specification**

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	90Ah@10hr-rate (9.0A to 1.80V/cell @25°C)
Weight	Approx.29.0Kg
Terminal	M6,Φ=16
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	93.0Ah 20hr-rate (4.65A to 1.80V/cell @25°C)
	90.0Ah 10hr-rate (9.0A to 1.80V/cell @25°C)
	78.0Ah 5hr-rate (15.6A to 1.75V/cell @25°C)
	58.6Ah 1hr-rate (58.6A to 1.60V/cell @25°C)
Max. Discharge Current	720A(5sec)
Internal Resistance	Approx.5.0mΩ(Fully charged)
Operating Temp. Range	Discharge: -20°C~50°C
	Charge : -10°C~50°C
	Storage : -20°C~40°C
Cycle Use	Charging Current:≤27.0A
	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**

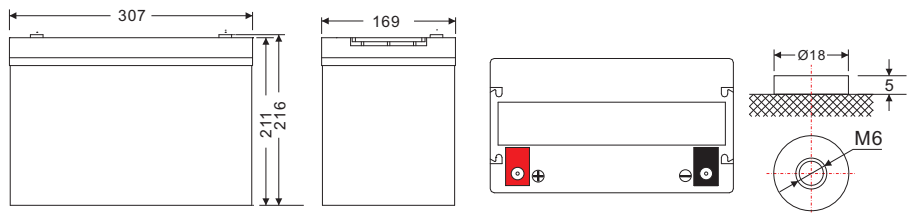
The MOTOMA standard series batteries designed with 12 years or more service life for general purpose, which designed with advanced technology, super heavy duty grid, high performance plates and electrolyte. The standard series batteries have long and reliable standby life and high consistency for better performance in series usage.

**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	306±1mm (12.09 inches)
Width	169±1mm (6.65 inches)
Height	211±1mm (8.31 inches)
Total Height	216±1mm (8.46 inches)



Unit: mm

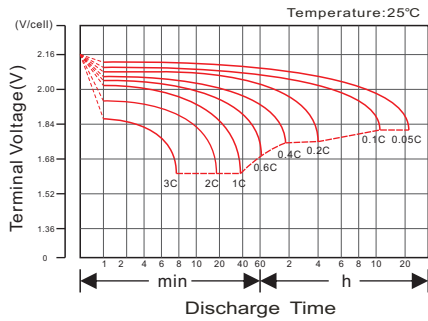
**Constant Current Discharge Characteristics: A (25°C)**

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	284.5	209.4	160.9	104.0	58.79	34.48	23.61	19.54	15.99	11.24	9.500	5.024
1.65V/cell	276.2	199.3	157.6	102.3	58.52	34.22	23.52	19.45	15.90	11.14	9.409	4.933
1.70V/cell	268.1	192.2	155.1	101.4	57.98	33.97	23.34	19.36	15.80	11.05	9.317	4.841
1.75V/cell	240.7	177.4	147.7	98.86	57.44	33.71	23.25	19.18	15.62	10.96	9.226	4.750
1.80V/cell	217.3	161.8	136.1	94.52	56.08	33.10	22.61	18.72	15.33	10.78	9.135	4.659
1.85V/cell	189.1	144.6	122.1	88.55	53.28	31.63	21.62	17.82	14.67	10.32	8.861	4.385

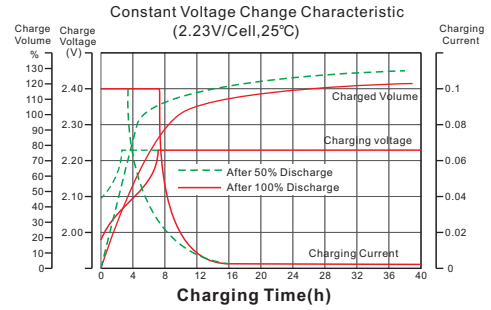
**Constant Power Discharge Characteristics: W (25°C)**

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	277.5	207.1	173.1	111.5	672.4	396.7	272.4	225.8	185.1	130.4	106.8	56.42
1.65V/cell	270.0	197.8	169.5	110.1	669.1	395.1	271.9	225.2	184.0	129.8	105.7	55.88
1.70V/cell	261.9	191.2	167.2	108.8	664.3	391.5	270.3	224.1	183.4	128.7	105.2	55.33
1.75V/cell	235.8	176.7	159.4	106.4	657.8	387.9	268.6	222.5	181.7	127.6	104.1	54.78
1.80V/cell	212.2	160.4	146.5	101.5	641.5	382.2	262.1	216.5	178.9	124.9	103.0	54.23
1.85V/cell	183.1	142.5	130.8	95.1.2	607.8	364.5	249.1	206.2	169.9	120.5	99.70	52.04

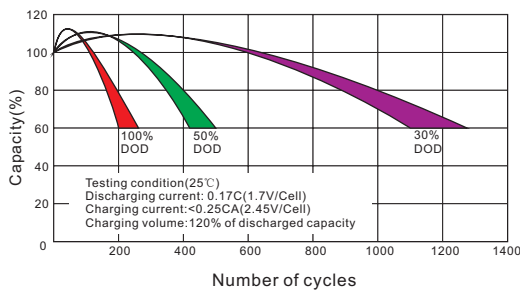
**Discharge Characteristics Curve**



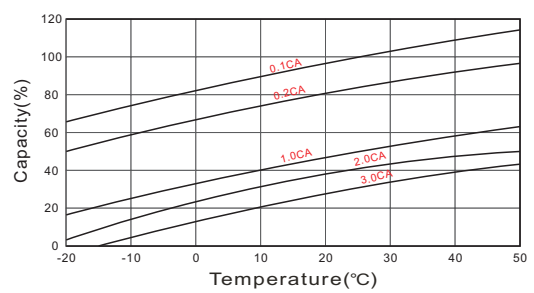
**Charging Characteristics Curve**



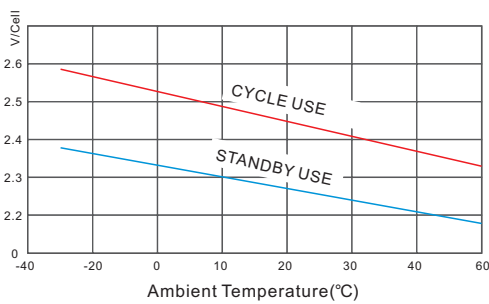
**Cycle life in relation to depth of Discharge**



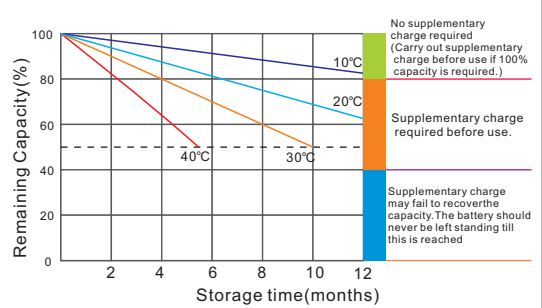
**Temperature effects on Capacity**



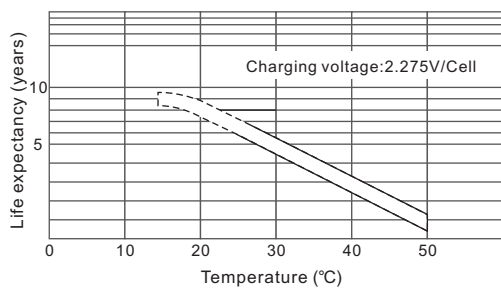
**Relationship between charging voltage and temperature**



**Self-discharge Characteristics**



**Temperature effects on Float life**



**Life Characteristics of Standby use**

