

**SLA BATTERY—STANDARD SERIES**

**Specification**

|                        |  |
|------------------------|--|
| Nominal Voltage        | 12V  |
| Number of cell         | 6  |
| Nominal Capacity       | 17Ah@20hr-rate (0.85A to 1.80V/cell @25°C)                                       |
| Weight                 | Approx.5.2Kg   |
| Terminal               | F3&F13   |
| Container Material     | ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request. |
| Rated Capacity         | 17.0Ah 20hr-rate (0.85A to 1.80V/cell @25°C)                                     |
|                        | 16.5Ah 10hr-rate (1.65A to 1.80V/cell @25°C)                                     |
|                        | 14.8Ah 5hr-rate (2.96A to 1.75V/cell @25°C)                                      |
|                        | 12.0Ah 1hr-rate (12.0A to 1.60V/cell @25°C)                                      |
| Max. Discharge Current | 255A(5sec)   |
| Internal Resistance    | Approx. 16mΩ(Fully charged)  |
| Operating Temp. Range  | Discharge: -20°C~50°C  |
|                        | Charge : -10°C~50°C  |
|                        | Storage : -20°C~40°C   |
| Cycle Use              | Charging Current: ≤5.1A  |
|                        | 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            | 6 years (floating charge)  |



**Introduction**

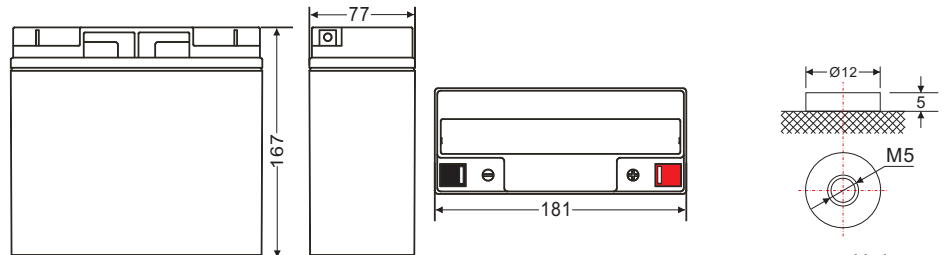
The MOTOMA standard series batteries designed with 6 years or more service life for general purpose, which designed with advanced technology, super heavy duty grid, high performance plates and electrolyte. The standard series batteries have long and reliable standby life and high consistency for better 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       | 181±1mm (7.13 inches) |
| Width        | 77±1mm (3.03 inches)  |
| Height       | 167±1mm (6.57 inches) |
| Total Height | 167±1mm (6.57 inches) |



Unit: mm

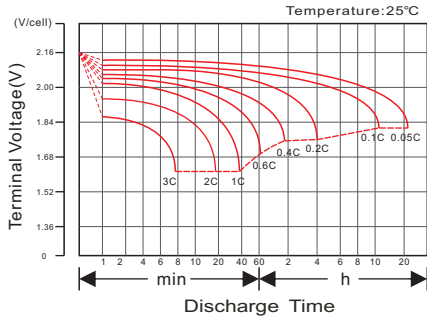
**Constant Current Discharge Characteristics: A (25°C)**

| F. V/Time  | 5min  | 10min | 15min | 30min | 1h    | 2h    | 3h    | 4h    | 5h    | 8h    | 10h   | 20h   |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V/cell | 68.83 | 46.00 | 35.37 | 20.44 | 12.09 | 6.303 | 4.461 | 3.659 | 3.033 | 2.012 | 1.742 | 0.978 |
| 1.65V/cell | 66.34 | 44.21 | 34.24 | 20.13 | 12.02 | 6.258 | 4.443 | 3.642 | 3.015 | 2.004 | 1.724 | 0.942 |
| 1.70V/cell | 62.76 | 42.84 | 33.45 | 19.97 | 11.94 | 6.243 | 4.426 | 3.624 | 2.997 | 1.996 | 1.706 | 0.924 |
| 1.75V/cell | 56.69 | 40.10 | 31.71 | 19.52 | 11.76 | 6.167 | 4.409 | 3.607 | 2.979 | 1.988 | 1.688 | 0.889 |
| 1.80V/cell | 50.63 | 37.36 | 29.95 | 19.05 | 11.59 | 6.061 | 4.374 | 3.590 | 2.961 | 1.980 | 1.653 | 0.853 |
| 1.85V/cell | 44.62 | 34.61 | 28.21 | 18.58 | 11.43 | 5.970 | 4.339 | 3.572 | 2.943 | 1.972 | 1.635 | 0.835 |

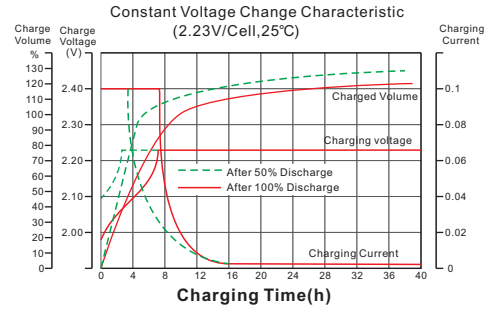
**Constant Power Discharge Characteristics: W (25°C)**

| F. V/Time  | 5min  | 10min | 15min | 30min | 1h    | 2h    | 3h    | 4h    | 5h    | 8h    | 10h   | 20h   |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V/cell | 752.8 | 489.3 | 397.6 | 245.3 | 145.0 | 75.55 | 53.43 | 43.70 | 42.75 | 24.19 | 20.59 | 11.51 |
| 1.65V/cell | 733.2 | 488.8 | 391.9 | 241.3 | 144.6 | 75.09 | 53.32 | 43.60 | 42.43 | 24.00 | 20.38 | 11.09 |
| 1.70V/cell | 718.5 | 474.1 | 382.9 | 239.7 | 144.3 | 74.91 | 53.22 | 43.60 | 42.32 | 23.96 | 20.17 | 10.88 |
| 1.75V/cell | 649.3 | 454.6 | 363.0 | 234.0 | 141.9 | 73.73 | 52.90 | 43.28 | 42.21 | 23.90 | 19.96 | 10.45 |
| 1.80V/cell | 580.0 | 425.2 | 342.9 | 228.4 | 139.5 | 72.73 | 52.48 | 42.97 | 42.11 | 23.80 | 19.64 | 10.14 |
| 1.85V/cell | 510.8 | 395.9 | 323.0 | 222.9 | 137.1 | 71.64 | 52.07 | 42.66 | 42.00 | 23.80 | 19.32 | 9.820 |

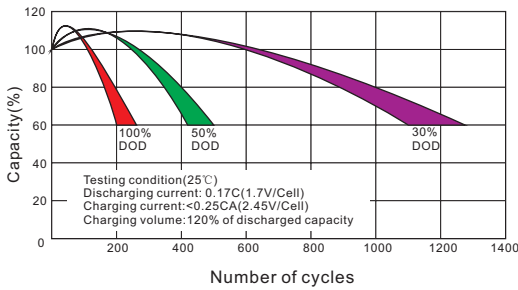
**Discharge Characteristics Curve**



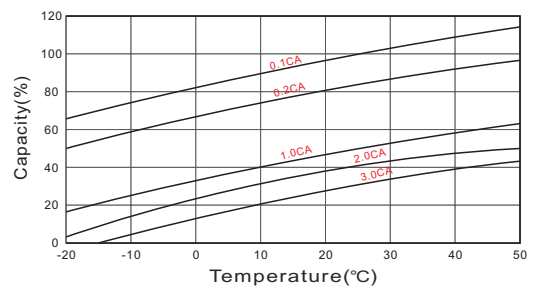
**Charging Characteristics Curve**



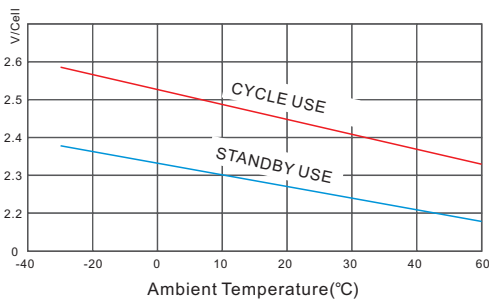
**Cycle life in relation to depth of Discharge**



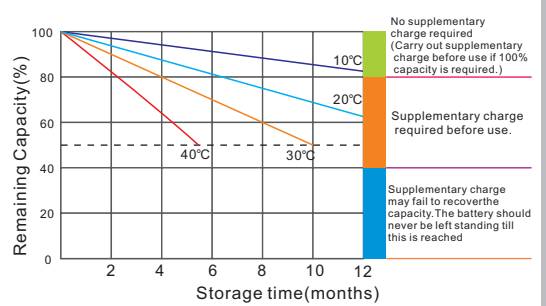
**Temperature effects on Capacity**



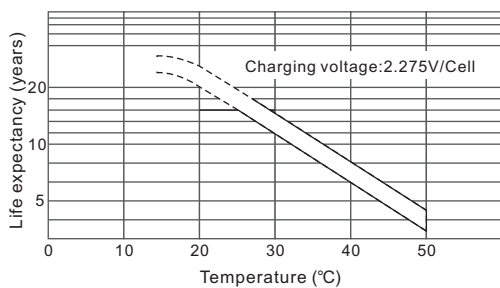
**Relationship between charging voltage and temperature**



**Self-discharge Characteristics**



**Temperature effects on Float life**



**Life Characteristics of Standby use**

