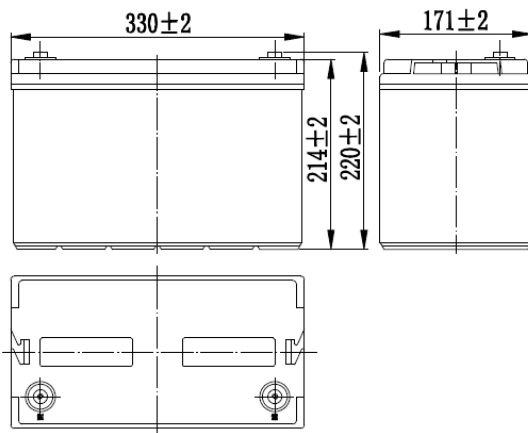


#### Specifications

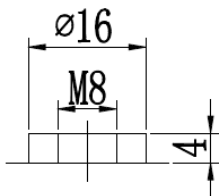
|                      |              |                     |
|----------------------|--------------|---------------------|
| Nominal Voltage      |              | 12 V                |
| Rated capacity(10HR) |              | 100Ah               |
| Dimension            | Length       | 330±2mm (12.99inch) |
|                      | Width        | 171±2mm (6.73inch)  |
|                      | Height       | 214±2mm (8.43inch)  |
|                      | Total Height | 220±2mm (8.66inch)  |
| Approx. Weight       |              | 33.3kg (73.4lbs)±3% |



#### Dimensions



#### Terminal



#### Characteristics

|                                          |             |                                                      |
|------------------------------------------|-------------|------------------------------------------------------|
| Capacity (25℃)                           | 10HR(10.8V) | 100 Ah                                               |
|                                          | 3HR(10.8V)  | 81Ah                                                 |
|                                          | 1HR(10.5V)  | 60Ah                                                 |
| Terminal type                            |             | T16                                                  |
| Internal resistance (Fully charged, 25℃) |             | Approx. 4mΩ                                          |
| Capacity affected by temperature (10HR)  | 40℃         | 102%                                                 |
|                                          | 25℃         | 100%                                                 |
|                                          | 0℃          | 85%                                                  |
|                                          | -15℃        | 65%                                                  |
| Self-discharge (25℃)                     | 3 month     | Remaining Capacity: 91%                              |
|                                          | 6 month     | Remaining Capacity: 82%                              |
|                                          | 12 month    | Remaining Capacity: 65%                              |
| Nominal operating temperature            |             | 25℃±3℃(77°F±5°F)                                     |
| Operating temperature range              | Discharge   | -15℃~50℃(5°F~122°F)                                  |
|                                          | Charge      | -10℃~50℃(14°F~122°F)                                 |
|                                          | Storage     | -20℃~50℃(-4°F~122°F)                                 |
| Float charging voltage(25℃)              |             | 13.50 to 13.80V<br>Temperature compensation: -18mV/℃ |
| Cyclic charging voltage(25℃)             |             | 14.50 to 15.00V<br>Temperature compensation: -30mV/℃ |
| Maximum charging current                 |             | 30A                                                  |
| Terminal material                        |             | Copper                                               |
| Maximum discharge current                |             | 800A(5 sec.)                                         |
| Designed floating life(20℃)              |             | 10 years                                             |

#### Construction

| Component    | Positive plate | Negative plate | Container | Cover | Separator | Electrolyte   | Safety valve | Terminal |
|--------------|----------------|----------------|-----------|-------|-----------|---------------|--------------|----------|
| Raw material | Lead dioxide   | Lead           | ABS       | ABS   | AGM       | Sulfuric acid | Rubber       | Copper   |

#### Constant Current Discharge Characteristics (A, 25℃)

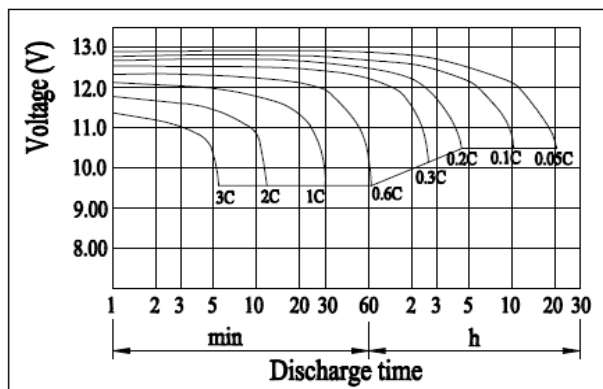
| F.V/TIME | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V    | 235   | 181   | 109   | 66.7  | 39.5 | 28.4 | 22.7 | 19.4 | 13.3 | 11.0 | 5.83 |
| 9.90V    | 228   | 177   | 106   | 65.7  | 39.2 | 28.3 | 22.6 | 19.3 | 13.3 | 11.0 | 5.82 |
| 10.2V    | 219   | 171   | 103   | 64.1  | 38.9 | 28.1 | 22.4 | 19.1 | 13.2 | 10.9 | 5.80 |
| 10.5V    | 210   | 165   | 101   | 62.1  | 38.3 | 27.9 | 22.2 | 19.0 | 13.1 | 10.9 | 5.76 |
| 10.8V    | 198   | 156   | 96.9  | 60.1  | 37.3 | 27.0 | 21.6 | 18.4 | 12.7 | 10.8 | 5.72 |

#### Constant Power Discharge Characteristics (Watt, 25℃)

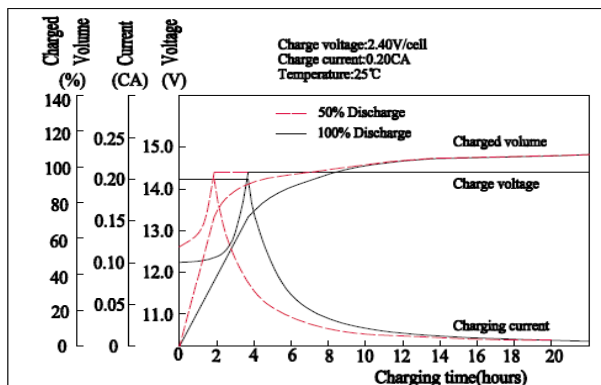
| F.V/TIME | 10min | 15min | 30min | 60min | 2h  | 3h  | 4h  | 5h  | 8h  | 10h | 20h  |
|----------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-----|------|
| 9.60V    | 2543  | 1992  | 1218  | 761   | 457 | 334 | 267 | 229 | 158 | 131 | 69.9 |
| 9.90V    | 2466  | 1944  | 1193  | 749   | 454 | 332 | 265 | 228 | 157 | 131 | 69.8 |
| 10.2V    | 2365  | 1873  | 1157  | 730   | 450 | 330 | 263 | 226 | 156 | 131 | 69.6 |
| 10.5V    | 2263  | 1809  | 1129  | 708   | 443 | 328 | 262 | 225 | 155 | 130 | 69.2 |
| 10.8V    | 2136  | 1713  | 1088  | 685   | 432 | 318 | 254 | 218 | 151 | 129 | 68.7 |

Note: The above characteristics data can be obtained within three charge/discharge cycles.

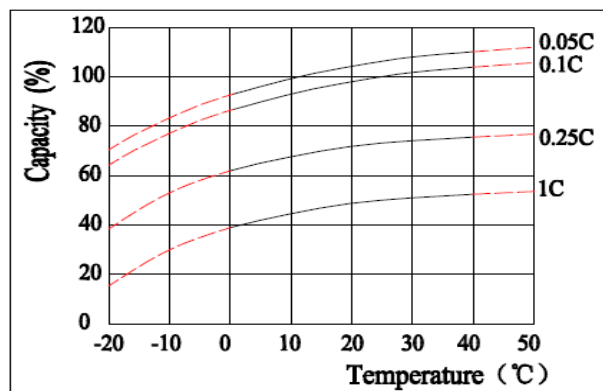
Discharge Characteristics(25°C)



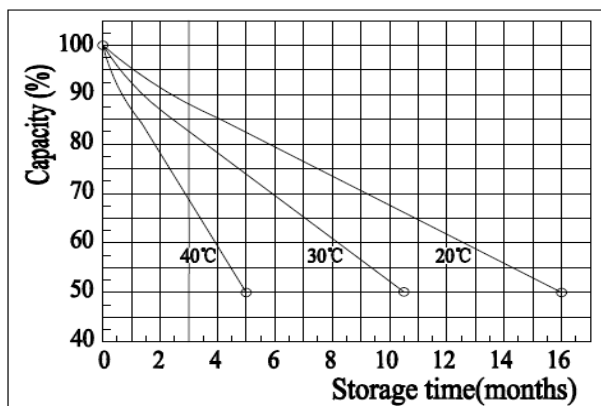
Charging Characteristics(25°C)



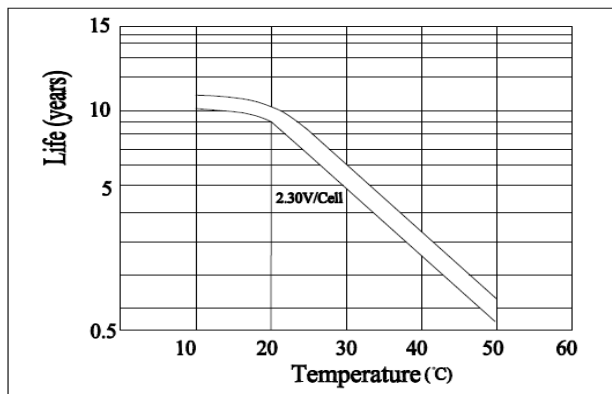
Effect of Temperature on Capacity



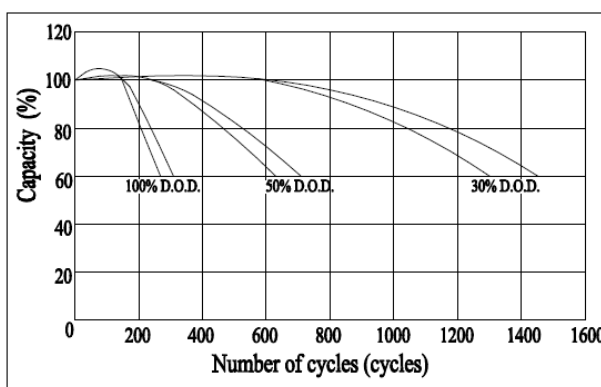
Self-discharge Characteristics



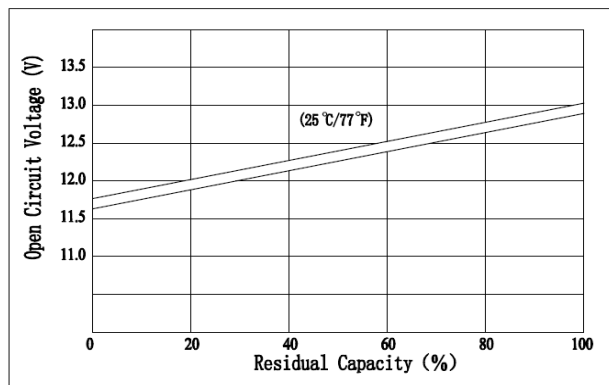
Floating Life on Temperature



Cycle Life on D.O.D(25°C)



The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature

