

## FT12-200Ah 12V200Ah

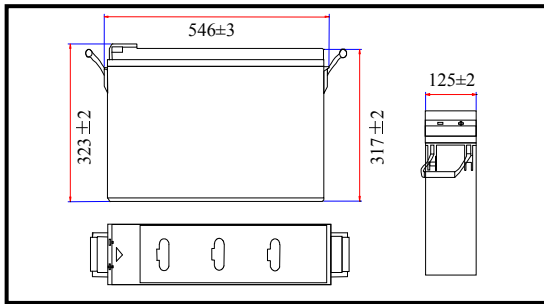
### Valve Regulated Lead Acid Battery



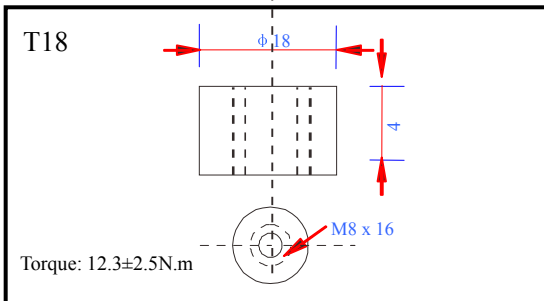
#### ● Specifications

|                       |                        |                     |
|-----------------------|------------------------|---------------------|
| Nominal voltage       | 12V (6 cells per unit) |                     |
| Rated capacity (10HR) | 200Ah/10.8V            |                     |
| Dimensions            | Length                 | 546±3mm (21.50inch) |
|                       | Width                  | 125±2mm (4.92inch)  |
|                       | Height                 | 317±2mm (12.48inch) |
|                       | Total height           | 323±2mm (12.72inch) |
| Approx. weight        | 60.50kg (133.40lbs)±3% |                     |

#### ● Outer dimensions (mm)



#### ● Terminal type (mm)



#### ● Characteristics

|   |   |  |
|---|---|--|
| Capacity (25°C)                           | 10HR (10.8V)                            | 200Ah  |
|   | 3HR (10.8V)                             | 150Ah  |
|   | 1HR (10.5V)                             | 110Ah  |
| Terminal type                             |   | T18  |
| Internal resistance (Fully charged, 25°C) |   | Approx. 3.5mΩ  |
| Capacity affected by temperature (10HR)   | 40°C                                    | 102%   |
|   | 25°C                                    | 100%   |
|   | 0°C                                     | 85%  |
|   | -15°C                                   | 65%  |
| Self-discharge (25°C)                     | 3 months                                | Remaining capacity: 91%                                  |
|   | 6 months                                | Remaining capacity: 82%                                  |
|   | 12 months                               | Remaining capacity: 65%                                  |
| Nominal operating temperature             |   | 25°C±3°C (77°F±5°F)                                      |
| Operating temperature range               | Discharge                               | -15°C~50°C (5°F~122°F)                                   |
|   | Charge                                  | -10°C~50°C (14°F~122°F)                                  |
|   | Storage                                 | -20°C~50°C (-4°F~122°F)                                  |
| Float charging voltage (25°C)             |   | 13.50 to 13.80V Temperature compensation: -18mV/°C/Block |
| Cyclic charging voltage (25°C)            |   | 14.50 to 15.00V Temperature compensation: -30mV/°C/Block |
| Maximum charging current                  |   | 60A  |
| Maximum discharge current                 |   | 1300A (5 sec.)   |
| Design life                               | 12 years for floating (25°C)            |  |
|   | Eurobat (20°C): 10-12 years, long life. |  |

#### ● 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 unit: Ampere/Block (at 25°C, 77°F)

| F.V/Time | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|----------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 9.60V    | 326   | 195   | 120   | 73.1 | 52.6 | 42.0 | 35.9 | 31.2 | 24.7 | 20.4 | 10.8 |
| 9.90V    | 318   | 191   | 118   | 72.6 | 52.3 | 41.8 | 35.7 | 31.0 | 24.5 | 20.3 | 10.8 |
| 10.2V    | 306   | 185   | 115   | 72.0 | 52.0 | 41.5 | 35.4 | 30.8 | 24.4 | 20.3 | 10.7 |
| 10.5V    | 296   | 181   | 111   | 70.9 | 51.6 | 41.2 | 35.2 | 30.6 | 24.2 | 20.1 | 10.7 |
| 10.8V    | 280   | 174   | 108   | 69.1 | 50.1 | 40.0 | 34.1 | 29.7 | 23.5 | 20.0 | 10.6 |

#### ● Constant power discharge characteristics unit: Watt/Block (at 25°C, 77°F)

| F.V/Time | 15min | 30min | 60min | 2h  | 3h  | 4h  | 5h  | 6h  | 8h  | 10h | 20h |
|----------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|
| 9.60V    | 3579  | 2188  | 1367  | 846 | 619 | 494 | 424 | 369 | 293 | 243 | 129 |
| 9.90V    | 3493  | 2144  | 1346  | 841 | 615 | 491 | 422 | 367 | 292 | 243 | 129 |
| 10.2V    | 3364  | 2078  | 1312  | 834 | 611 | 488 | 419 | 364 | 290 | 242 | 129 |
| 10.5V    | 3249  | 2028  | 1271  | 821 | 607 | 485 | 416 | 362 | 287 | 240 | 128 |
| 10.8V    | 3078  | 1953  | 1230  | 800 | 589 | 470 | 404 | 351 | 279 | 239 | 127 |

Note 1: Above characteristics data can be obtained within three charge and discharge cycles.

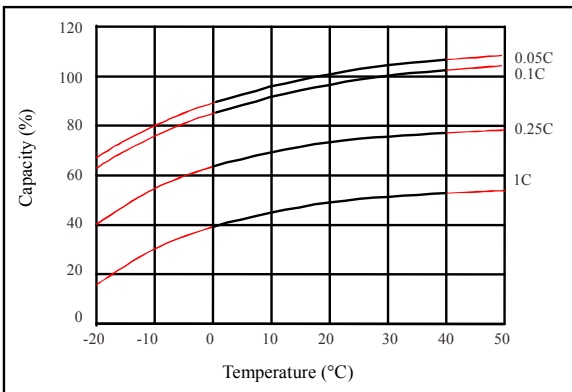
### ● Discharge characteristics (25°C)



### ● Charging characteristics (25°C)



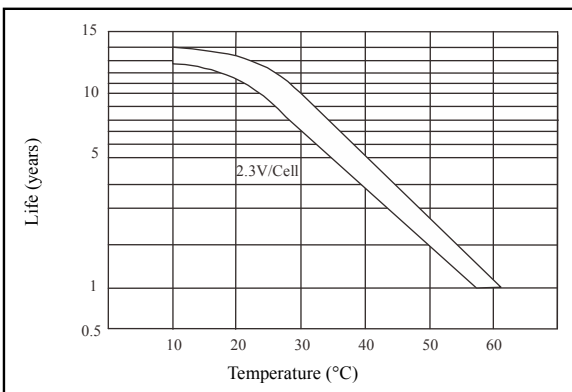
### ● Temperature effects on capacity



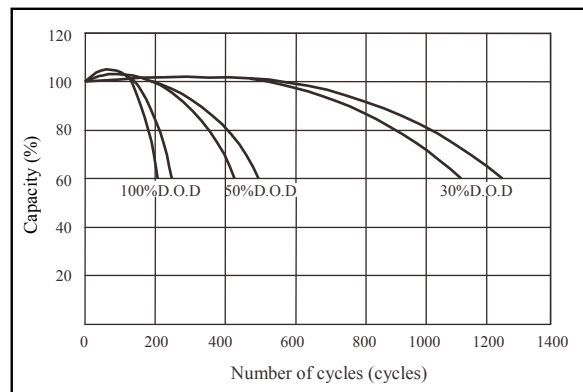
### ● Self-discharge characteristics



### ● Floating life on temperature



### ● Cycle life on D.O.D (25°C)



### ● Relationship for OCV and capacity (25°C)



### ● Relationship for charging voltage and temperature

