

NP12-65Ah 12V65Ah

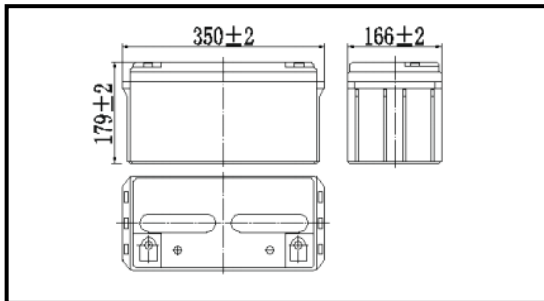
Valve Regulated Lead Acid Battery



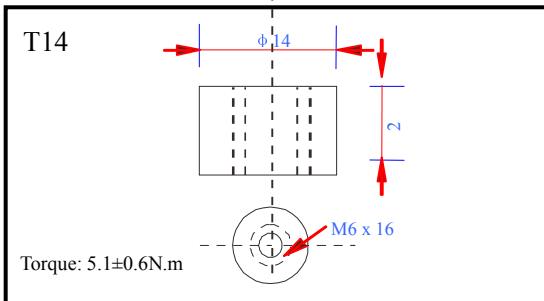
Specifications

| | | |
|-----------------------|------------------------|---------------------|
| Nominal voltage | 12V (6 cells per unit) | |
| Rated capacity (10HR) | 65Ah/10.8V | |
| Dimensions | Length | 350±2mm (13.78inch) |
| | Width | 166±2mm (6.54inch) |
| | Height | 179±2mm (7.05inch) |
| | Total height | 179±2mm (7.05inch) |
| Approx. weight | 20.40kg (45.00lbs)±3% | |

Outer dimensions (mm)



Terminal type (mm)



Characteristics

| | | |
|---|---|--|
| Capacity (25°C) | 10HR (10.8V) | 65Ah |
| | 3HR (10.8V) | 48Ah |
| | 1HR (10.5V) | 36Ah |
| Terminal type | | T14 |
| Internal resistance (Fully charged, 25°C) | | Approx. 6.5mΩ |
| 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 | | 19.5A |
| Maximum discharge current | | 650A (5 sec.) |
| Design life | 10 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)

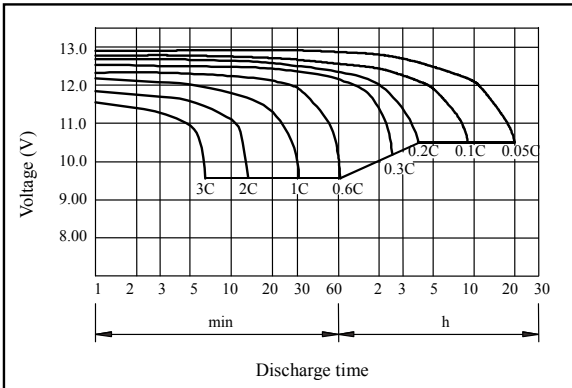
| F.V/Time | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V | 142 | 109 | 65.3 | 40.2 | 23.8 | 17.1 | 13.7 | 11.7 | 8.02 | 6.62 | 3.51 |
| 9.90V | 137 | 107 | 64.0 | 39.6 | 23.6 | 17.0 | 13.6 | 11.6 | 7.98 | 6.60 | 3.50 |
| 10.2V | 132 | 103 | 62.1 | 38.6 | 23.4 | 16.9 | 13.5 | 11.5 | 7.92 | 6.58 | 3.49 |
| 10.5V | 126 | 99.2 | 60.6 | 37.4 | 23.0 | 16.8 | 13.4 | 11.4 | 7.87 | 6.55 | 3.47 |
| 10.8V | 119 | 93.9 | 58.3 | 36.2 | 22.5 | 16.3 | 13.0 | 11.1 | 7.63 | 6.50 | 3.45 |

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

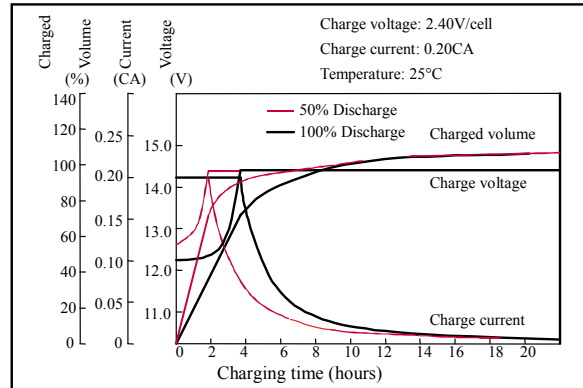
| F.V/Time | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|-----|-----|-----|-----|------|------|------|
| 9.60V | 1530 | 1199 | 733 | 458 | 275 | 201 | 161 | 138 | 95.3 | 79.0 | 42.1 |
| 9.90V | 1484 | 1170 | 718 | 451 | 273 | 200 | 160 | 137 | 94.7 | 78.9 | 42.0 |
| 10.2V | 1423 | 1127 | 696 | 440 | 271 | 199 | 159 | 136 | 94.1 | 78.6 | 41.9 |
| 10.5V | 1362 | 1089 | 679 | 426 | 267 | 197 | 157 | 135 | 93.4 | 78.2 | 41.6 |
| 10.8V | 1286 | 1031 | 655 | 412 | 260 | 191 | 153 | 131 | 90.6 | 77.6 | 41.3 |

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

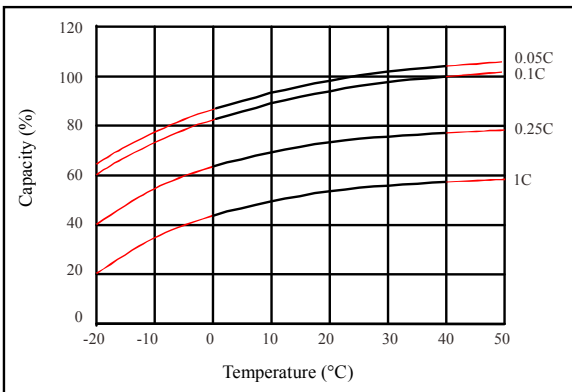
● Discharge characteristics (25°C)



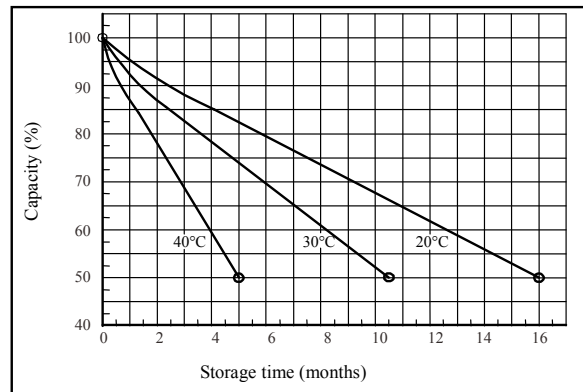
● Charging characteristics (25°C)



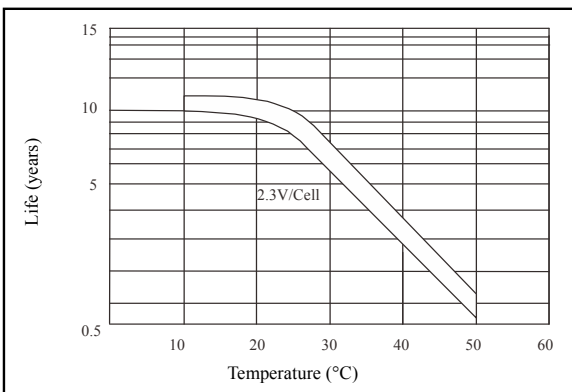
● Temperature effects on capacity



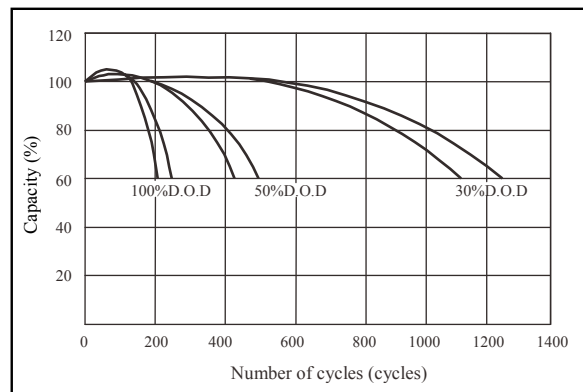
● Self-discharge characteristics



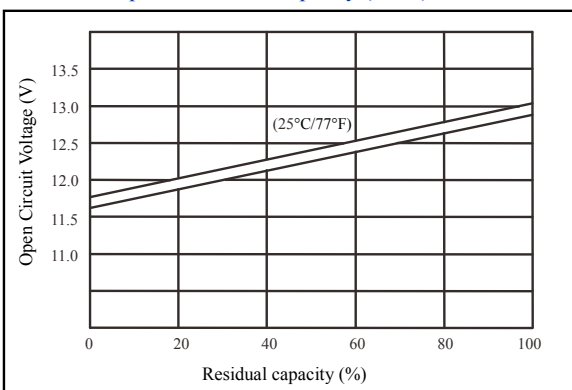
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

