NITRO

# VALVE REGULATED LEAD-ACID BATTERY

# N6-12T2

## SPECIFICATIONS

| | | |
|---|---|---|
| Rated Voltage | 6V | |
| Nominal Capacity | 12.0Ah (C20, 1.75V/cell) | |
| Dimension | Length | 151±2mm (5.94 inches) |
| | Width | 50.5±1mm (1.99 inches) |
| | Container Height | 94±1mm (3.70 inches) |
| | Total Height | 100±2mm (3.94 inches) |
| Approx Weight | 1.60 Kg (3.53 lbs) | |
| Terminal | T2 | |
| Container Material | ABS | |
| Rated Capacity (25°C) | 12.0Ah | (20hr,0.600A,1.75V/cell) |
| | 11.2Ah | (10hr,1.12A,1.75V/cell) |
| | 10.2Ah | (5hr,2.04A,1.75V/cell) |
| | 9.00Ah | (3hr,3.00A,1.75V/cell) |
| | 7.20Ah | (1hr,7.20A,1.60V/cell) |
| Max. Discharge Current | 180A (5s) | |
| Internal Resistance (25°C) | Approx 9mΩ | |
| Operating Temp.Range | Discharge | -20~60°C (-4~140°F) |
| | Charge | -15~50°C (-4~122°F) |
| | Storage | -15~40°C (5~104°F) |
| Nominal Operating Temp. Range | 25±3°C (77±5°F ) | |
| Cycle Use | Initial Charging Current less than 3.6A. Voltage 7.2V~7.5V at 25°C (77°F) Temp. Coefficient -15mV/°C | |
| Standby Use | Initial Charging Current less than 3.6A. Voltage 6.75V~6.9V at 25°C (77°F) Temp. Coefficient -10mV/°C | |
| Capacity affected by Temperature | 40°C (104°F) | 103% |
| | 25°C (77°F) | 100% |
| | 0°C (32°F) | 86% |
| Self Discharge | N series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. | |


## APPLICATIONS

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

## STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- IATF16949, ISO45001,ISO 9001 and ISO 14001 certified production facilities

**Constant Current Discharge (Amperes) at 25ºC (77ºF)**

| F.V/Time | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1.85V/cell** | 69.9 | 51.1 | 38.8 | 33.1 | 24.8 | 18.2 | 14.5 | 8.56 | 6.18 | 4.92 | 4.25 | 3.64 | 2.87 | 2.40 | 1.27 |
| **1.80V/cell** | 75.1 | 54.2 | 40.7 | 34.4 | 25.6 | 18.7 | 14.8 | 8.72 | 6.28 | 5.00 | 4.31 | 3.70 | 2.91 | 2.44 | 1.29 |
| **1.75V/cell** | 79.2 | 56.3 | 42.0 | 35.3 | 26.2 | 19.1 | 15.1 | 8.88 | 6.38 | 5.06 | 4.37 | 3.74 | 2.94 | 2.46 | 1.30 |
| **1.70V/cell** | 82.9 | 58.6 | 43.4 | 36.4 | 26.9 | 19.5 | 15.4 | 9.01 | 6.47 | 5.13 | 4.43 | 3.78 | 2.97 | 2.48 | 1.31 |
| **1.65V/cell** | 85.8 | 60.3 | 44.5 | 37.1 | 27.4 | 19.8 | 15.6 | 9.11 | 6.54 | 5.18 | 4.46 | 3.82 | 2.99 | 2.50 | 1.32 |
| **1.60V/cell** | 91.0 | 62.8 | 46.0 | 38.2 | 27.1 | 20.3 | 16.0 | 9.29 | 6.66 | 5.27 | 4.54 | 3.87 | 3.04 | 2.53 | 1.34 |

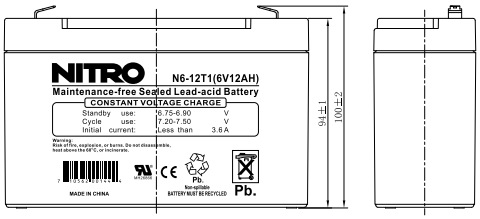
**Constant Power Discharge (Watts/cell) at 25ºC (77ºF)**

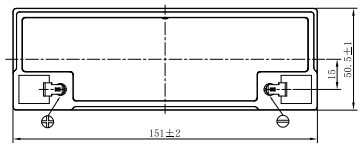
| F.V/Time | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1.85V/cell** | 132.2 | 97.3 | 74.2 | 63.7 | 47.9 | 35.2 | 28.2 | 16.8 | 12.1 | 9.70 | 8.39 | 7.20 | 5.68 | 4.77 | 2.54 |
| **1.80V/cell** | 140.8 | 102.4 | 77.4 | 65.9 | 49.2 | 36.1 | 28.8 | 17.0 | 12.3 | 9.82 | 8.50 | 7.30 | 5.76 | 4.84 | 2.57 |
| **1.75V/cell** | 146.7 | 105.7 | 79.5 | 67.3 | 50.3 | 36.7 | 29.2 | 17.3 | 12.5 | 9.84 | 8.60 | 7.38 | 5.82 | 4.88 | 2.60 |
| **1.70V/cell** | 152.1 | 109.2 | 81.7 | 68.9 | 51.3 | 37.4 | 29.7 | 17.5 | 12.6 | 10.1 | 8.70 | 7.45 | 5.87 | 4.93 | 2.62 |
| **1.65V/cell** | 156.1 | 111.7 | 83.4 | 70.2 | 52.1 | 37.9 | 30.1 | 17.7 | 12.8 | 10.1 | 8.76 | 7.52 | 5.92 | 4.96 | 2.64 |
| **1.60V/cell** | 162.4 | 114.9 | 85.7 | 71.9 | 53.2 | 38.6 | 30.6 | 18.0 | 13.0 | 10.3 | 8.88 | 7.61 | 5.99 | 5.02 | 2.67 |

## GENERAL FEATURES

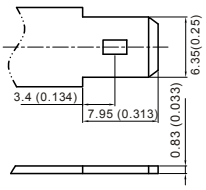
- 5 years design life (25°C)
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
- High purity raw material: ensure low self discharge rate

## DIMENSIONS



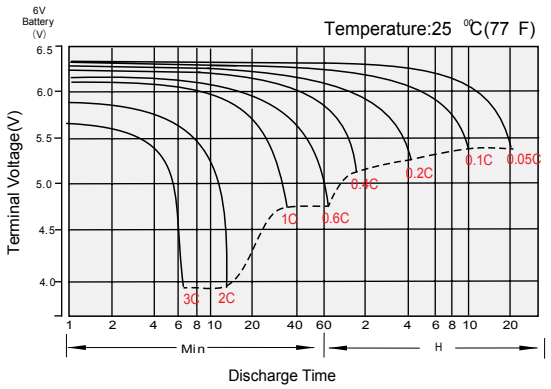




**T2 Terminal**
Unit: mm [inches]

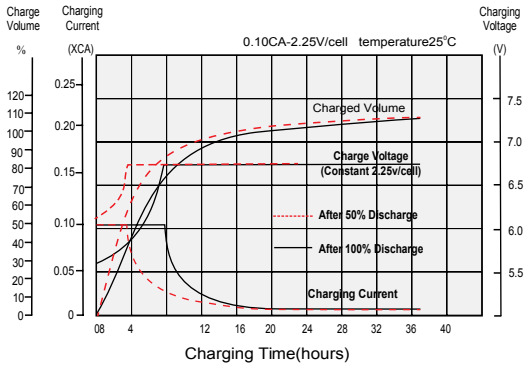



## PERFORMANCE CHARACTERISTICS

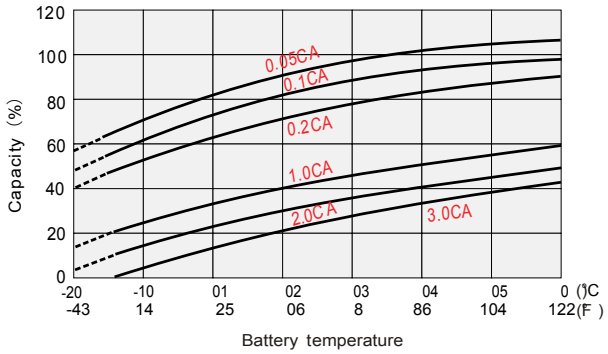
### Discharge Characteristics



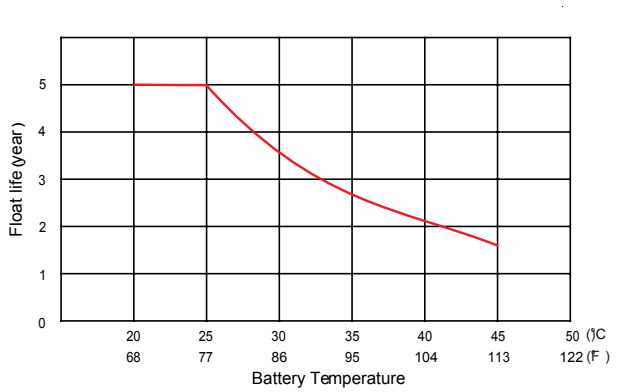

### Float Charging Characteristics




### Temperature Effects in Relation to Battery Capacity




### Float Service Life

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