

# NILE BATTERY



## NBT Series 12 Volt

Version: 5

### Structure Feature

- Impact proof and vibration proof strengthened ABS material
- Patent terminal sealing technology
- Higher assembly pressure, preventing active material shredding off the plates
- High sensible value ,ensuring the reliability and safety during the operation

### Compliant Standards

- IEC 60896-21/22
- BS 6290-4

### Advantages

- Long life according to EUROBAT Classification
- Maximum charge efficiency
- High gas recombination efficiency
- Low self-discharge rate
- Easy installation and handling
- Vertical or horizontal installation

### Main Applications

- Communication Equipment
- UPS
- Emergency Power system
- Power Tools
- Medical Equipment
- Control Equipment
- Solar Energy System
- Alarm System
- Cable Television

### Technical Features

- Nominal Voltage : 12V
- Self discharge rate:<2%per month at 25°C
- Recombination efficiency : >98%
- Grid Alloy is corrosion proof, no pollution and less water loss
- Design life 5~8 years at 25°C
- Wide Working Temperature: -15°C~+45°C

### Technical Information

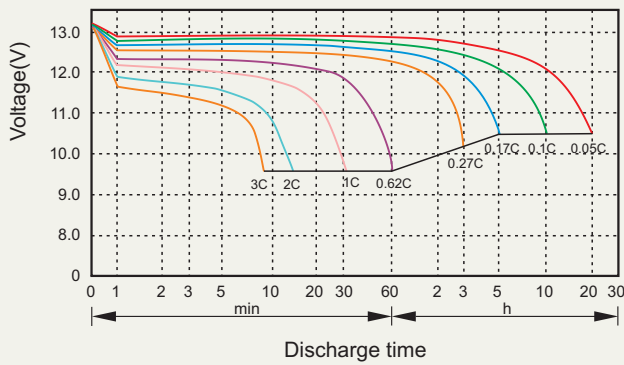
| Battery Type | Nominal Voltage (V) | Nominal Capacity (25°C) | Float Voltage (25°C) | Equalize Voltage (25°C) | Normal Charge Current (25°C) | Internal Resistance (mΩ) | Length (mm) | Width (mm) | Height (mm) | Total Height (mm) | Weight (kg) |
|--------------|---------------------|-------------------------|----------------------|-------------------------|------------------------------|--------------------------|-------------|------------|-------------|-------------------|-------------|
| 12V7Ah       | 12                  | 7                       | 13.50 V/block        | 14.40 V/block           | 0.1C <sub>10</sub> A         | 30                       | 151         | 65         | 94          | 100               | 2.0         |
| 12V18Ah      | 12                  | 18                      |                      |                         |                              | 14                       | 181         | 77         | 164         | 168               | 5.4         |
| 12V28Ah      | 12                  | 28                      |                      |                         |                              | 12                       | 175         | 166        | 119         | 125               | 8.4         |
| 12V42Ah      | 12                  | 42                      |                      |                         |                              | 8.5                      | 196         | 166        | 159         | 170               | 13.7        |
| 12V65Ah      | 12                  | 65                      |                      |                         |                              | 7                        | 350         | 167        | 172         | 174               | 20.9        |
| 12V100Ah     | 12                  | 100                     |                      |                         |                              | 4                        | 330         | 176        | 217         | 226               | 30          |
| 12V120Ah     | 12                  | 120                     |                      |                         |                              | 3.62                     | 375         | 174        | 219         | 224               | 34.8        |
| 12V200Ah     | 12                  | 200                     |                      |                         |                              | 3                        | 522         | 234        | 218         | 223               | 59          |



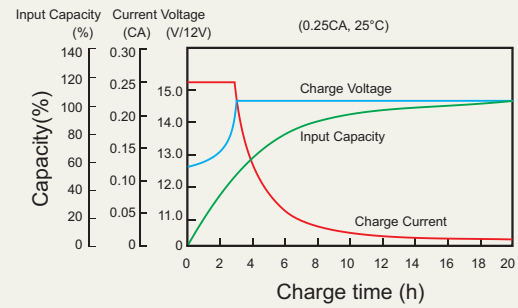
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## Discharge Data

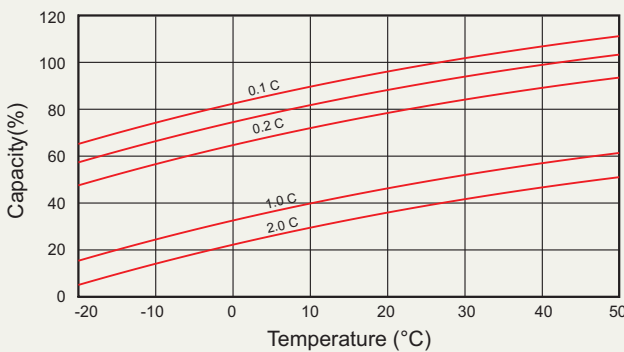
| Battery Type | Discharge Current Rates-Amperes (25°C) |       |       |      |
|--------------|--|-------|-------|------|
|              | C1                                     | C3    | C5    | C10  |
| 12V7Ah       | 4.34                                   | 1.85  | 1.21  | 0.7  |
| 12V18Ah      | 11.23                                  | 4.60  | 3.16  | 1.8  |
| 12V28Ah      | 16.22                                  | 6.95  | 4.51  | 2.8  |
| 12V42Ah      | 26.12                                  | 10.45 | 7.05  | 4.2  |
| 12V65Ah      | 40.45                                  | 16.45 | 11.18 | 6.5  |
| 12V100Ah     | 62.00                                  | 25.65 | 17.10 | 10.0 |
| 12V120Ah     | 72.50                                  | 30.60 | 20.45 | 12.0 |
| 12V200Ah     | 121.20                                 | 50.65 | 34.04 | 20.0 |
| End Voltage  | 1.60                                   | 1.65  | 1.70  | 1.75 |



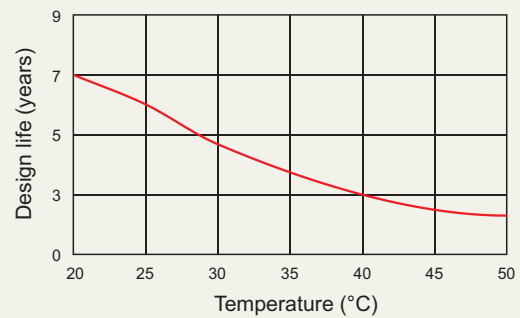
Discharge voltage vs. discharge time



Charge capacity vs. charge time



Discharge capacity vs. temperature



Design life vs. temperature