NSB 13 Silver Battery™
Specifically designed for semi stable mains

Visit our website to find out more www.northstarbattery.com

Designed for high power and superior cyclic capability - built to be reliable, even when the power mains are not.

- High cycle capability, high energy density
- Fast recharge performance
- 10 year float life at 25°C (77°F)
- EUROBAT design life definition: Long Life (12+ years)
- State-of-the-art automated manufacturing ensures consistency and reliability
- Advanced 3 stage terminal design to ensure leak-free operation
  - Female M6 brass terminals provide maximum performance
- Operating temperature range: -40°C to +65°C (-40°F to 149°F)
- High modulus Polyphenylene Oxide (PPO) plastic materials designed to withstand extended elevated operating temperatures and maintain high battery compression essential for reliable operation
  - Non-halogenated, thermally sealed plastic casing and cover
  - Flame retardant (UL 94 V0) and LOI of at least 28%
- Approved as non-hazardous cargo for ground, sea, and air transport
  - DOT 49CFR173.159(d), (i) and (ii)
NSB 13 Silver Battery™
Technical Specifications

**Electrical**

<table>
<thead>
<tr>
<th>Capacity Discharge (hours)</th>
<th>8 hour capacity to 1.75 Volts/Cell</th>
<th>12 Ah</th>
<th>12 Ah</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 hour capacity to 1.80 Volts/Cell</td>
<td>12 Ah</td>
<td>12 Ah</td>
<td></td>
</tr>
<tr>
<td>Float Voltage</td>
<td>2.29 +/- 0.02</td>
<td>2.27 +/- 0.02</td>
<td></td>
</tr>
<tr>
<td>Nominal Voltage</td>
<td>12 V</td>
<td>12 Ah</td>
<td></td>
</tr>
<tr>
<td>Impedance [1 kHz]</td>
<td>8.9 mΩ @ 25°C (77°F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conductance</td>
<td>409 S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short Circuit Current</td>
<td>600 A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Capacity @ 25°C/Ah        | 10                                      | 11                              | 11                                      | 12                                      | 12                                      |
| End of Discharge          | 1.70                                    | 1.75                            | 1.75                                    | 1.75                                    | 1.80                                    |

| Dimensions                | Height 129 mm (5.1 in)                  | Weight 6 kg (12 lbs)              |
|                          | Width 83 mm (3.3 in)                    | Terminal Female M6 x 1.0          |
|                          | Depth 175 mm (6.9 in)                   | Terminal Torque 6.0 Nm (53 in-lbs)|

| Ah Capacity Ratings @ 25°C (77°F) |
|-------------------|------------------|------------------|------------------|------------------|
| Capacity Discharge | 1                | 2                | 4                | 8                | 10               |
| Capacity @ 25°C/Ah | 10               | 11               | 11               | 12               | 12               |
| End of Discharge   | 1.70             | 1.75             | 1.75             | 1.75             | 1.80             |

**Drawings**

All NorthStar batteries are compliant with:
- Telcordia SR4228; IEC 60896; Bellcore GR-63-Core, Issue 1; British, German, and Russian telecom standards; UL approved.
- NorthStar is registered to ISO 9001 and ISO 14001.

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