

VentPro

Reduced Maintenance Nickel Cadmium Batteries for Stationary Applications

VentPro

A new reduced maintenance Nickel Cadmium battery developed by HBL for high temperature stationary power backup applications.

The major design improvements of this reduced maintenance battery product are,

- ◆ 90% capacity is available even at +40°C after constant charge at 1.43 V/cell in 15 hours with a charge current of 0.1 C₅ A.
- ◆ Top-up only once during its life time under recommended operating conditions.

Construction:

The construction is based on conventional pocket plate technology by introducing special features to enhance the low water usage, giving extended service life and outstanding performance specially when operating at high temperature.

The active materials are encapsulated between folded steel strips, which are perforated on both sides, thereby increasing the effective surface area and making battery more efficient. These batteries use a special separator, which allows gases generated during charging to recombine inside the cell thus ensuring minimize the water loss. This concept enables the batteries exceeding the gas recombination requirements defined in IEC 62259. In normal conditions, VentPro battery shall have **only one topping up with water in its total service life.**

The VentPro batteries are available in tough, shock resistant, fusion welded polypropylene cell containers and lids.

HBL's VentPro batteries are supplied with the electrolyte, inter-cell connectors, related hardware and accessories required for normal operation and maintenance. Steel racks can also be offered along with batteries.

Features:

- Proven pocket plate reliability with lifetime of >20 years and high resistance to failure.
- Special fibre separator to improve recombination and reduce water consumption.
- VentPro's controlled recombination rates eliminate risk of thermal runaway.
- Specially Designed low pressure vent caps.
- Batteries conform to IEC 62259 standard.



Benefits :

- ◆ 90% capacity is available even at +40°C after constant charge at 1.43 V/cell in 15 hours with a charge current of 0.1 C₅ A.
- ◆ Top-up only once during its life time under recommended operating conditions.
- ◆ High reliability & dependable performance
- ◆ Wide operating temperature range
- ◆ Good charge acceptance with current limit of 0.1 C₅ A.
- ◆ No risk of sudden death
- ◆ Long-life & Low life cycle cost.

Battery range and Applications:

The VentPro batteries are available in a choice of plate types, which were designed for specific applications.

- ◆ **L** type cells : 15 Ah to 1680 Ah
- ◆ For low discharge rate applications between 3 hours to 100 hours.
 - ◆ Oil and gas
 - ◆ Railway Signaling
 - ◆ Photovoltaic
 - ◆ Fire Alarm Systems
 - ◆ Cathodic Protection
- ◆ **M** type cells : 8 Ah to 1340 Ah
- ◆ For medium discharge applications between 30 minutes to 3 hours.
 - ◆ Switchgear
 - ◆ Instrumentation & Process control
 - ◆ UPS
 - ◆ Motive power
 - ◆ Emergency lighting



HBL

HBL NiCad Batteries(UK) Ltd.

Unit 30-33, Webb Ellis Business Park, Woodside Park, Rugby, Warwickshire, CV 21 2NP, England.
Tel: +44(0) 1788 553577,, Email : contact@hblnicad.co.uk