

HV Series Valve Regulated Pocket Plate NiCd Batteries

Ultra Low Maintenance Nickel Cadmium Cells (7–1680 Ah)



1.2V Cell

2.4V Block

Valve regulated pocket plate batteries were designed to meet the needs of applications requiring the traditional high reliability of nickel cadmium pocket plate cells without the need to top-up with water. The VRPP battery works on the oxygen recombination principle and therefore has a much reduced water consumption. The level of recombination of these cells is 85–95%. Normal vented type cells will have only a 30–35% recombination efficiency. When the VRPP cells are properly float charged (between 1.40–1.42 V/cell) they will not need to be topped off with water for nearly 20 years. If the levels do become low during the life of the battery there are provisions to add water to the cells.

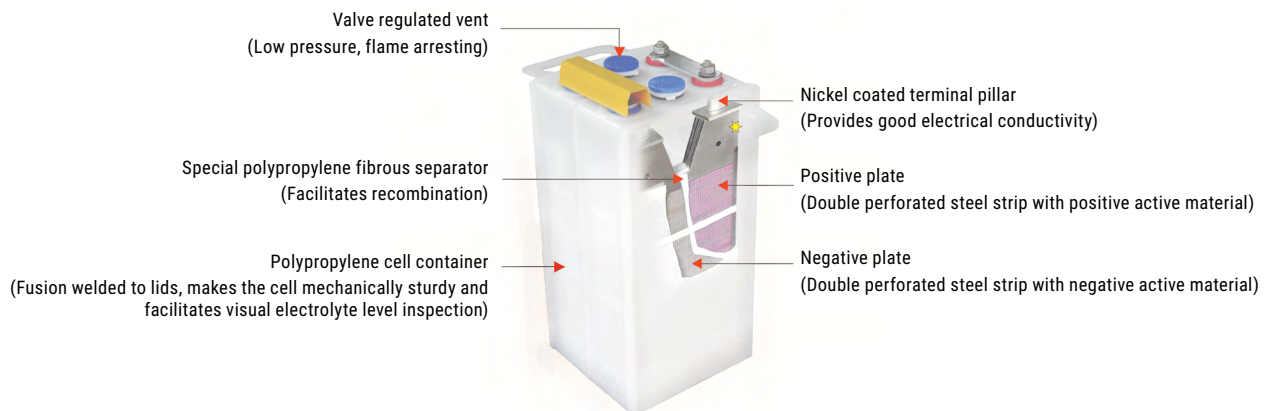
The VRPP batteries are available in 1.2V single cells or 2.4V, 3.6V or 4.8V multi-cell blocks. Available in medium rate (HVM Series) and low rate (HVL Series), all batteries are supplied with the electrolyte, intercell connectors, related hardware and accessories required for normal operation and maintenance.

Features

- Long float life: 25 years
- High cycle life: 2000 cycles @ 20% DOD
- Reliable and predictable performance
- Operating temp.: -4° to 131° F (Storage: -22° to 113° F)
- Low maintenance
- Minimal gassing
- Very resistant to electrical and mechanical abuse
- No sudden failure due to internal corrosion
- Good performance at low temperatures

Operating Notes

- Float voltage range: 1.43 V/cell
- Max. equalize voltage: 1.45 V/cell
- Current limit: 10% of C_5 ($C_5 = 5$ hr. Ah Rate)



Technical Data

| Pocket Plate Cell Series | Capacity Range (Ah) | Plate Information | Plate Thickness | Typical Back-Up | Typical Applications |
|---------------------------------|---------------------|---|-----------------|---------------------------------|--|
| Low Rate - Long Duration HVL | 7–1340 | Thick plates to provide a large capacity reserve for a long duration | 5 mm | 3 hr. or more | Oil & gas, railway signaling, telecom, power plants, emergency lighting, photovoltaic, fire alarms |
| Medium Rate HVM | 15–1680 | Optimized plate thickness which is ideal for medium discharge performance and durations | 3 mm | 30 min. to 3 hr. or mixed loads | Switchgear protection, UPS, emergency lighting, instrumentation and process control |

Use link below for detailed battery information.