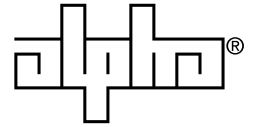


# NiCAD CLEAR CASE

NICKEL CADMIUM ALKALINE BATTERY



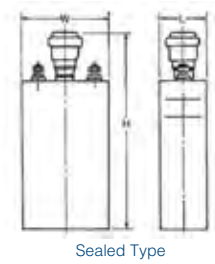
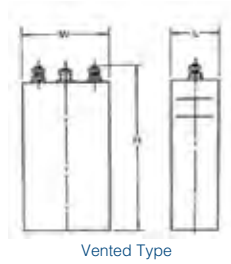
- High performance alkaline storage battery
- Cells do not emit any corrosive fumes and can be placed near delicate electrical equipment
- Strong impact-resistant container protects against shocks and vibrations
- Wide operating temperature range from -20 to 50°C
- 20 year proven design life
- 2 year full warranty

The Clear Case Nickel Cadmium battery is designed to provide backup battery power to support various critical applications. This high performance battery has four different discharge models that allow the end-user to choose the correct battery bank for individual applications. The HDV NiCad Clear Case models are available for very high discharge rates. The impact-resistance clear case allows the user to easily observe electrolyte levels, as the batteries require minimal topping throughout their lifecycle. Each battery is delivered in charged condition filled with electrolyte.

# NiCad Clear Case

## General Specifications

|                              |                               |
|------------------------------|-------------------------------|
| Model:                       | HDV very high rate            |
| Standard Warranty:           | 2 yr full plus 18 yr prorated |
| Service Life:                | 20 yr                         |
| Range of Capacity:           | 10 to 450Ah                   |
| Time of Discharge:           | 1sec to 1hr                   |
| Operating Temperature Range: | -20 to 30°C (-36 to 90°F)     |
| Terminal Type:               | Threaded Nickel Plated Post   |



## HDV-P Mechanical Specifications

| Cell Type | Dimension (in/mm) |            |           |           | Weight (lbs/kg) | Electrolyte |
|-----------|-------------------|------------|-----------|-----------|-----------------|-------------|
|           | H Vented          | H Sealed   | W         | L         |                 |             |
| HDV 10P   | 10.7 / 272        | 13.1 / 333 | 5.6 / 143 | 2.0 / 52  | 6.8 / 3.1       | 1.5 / 0.7   |
| HDV 20P   | 10.7 / 272        | 13.1 / 333 | 5.6 / 143 | 2.0 / 52  | 6.8 / 3.1       | 1.5 / 0.7   |
| HDV 30P   | 11.1 / 282        | 13.1 / 333 | 5.6 / 143 | 3.0 / 76  | 10.4 / 4.7      | 2.9 / 1.3   |
| HDV 40P   | 11.1 / 282        | 13.1 / 333 | 5.6 / 143 | 3.0 / 76  | 11.5 / 5.2      | 2.2 / 1.0   |
| HDV 50P   | 11.1 / 282        | 13.1 / 333 | 5.7 / 145 | 3.9 / 100 | 15.2 / 6.9      | 3.1 / 1.4   |
| HDV 60P   | 11.1 / 282        | 13.1 / 333 | 5.7 / 145 | 3.9 / 100 | 15.9 / 7.2      | 2.6 / 1.2   |
| HDV 80P   | 14.6 / 370        | 17.9 / 455 | 4.7 / 120 | 6.7 / 170 | 24.3 / 11.0     | 6.2 / 2.8   |
| HDV 100P  | 14.6 / 370        | 17.9 / 455 | 4.7 / 120 | 6.7 / 170 | 26.5 / 12.0     | 5.3 / 2.4   |
| HDV 120P  | 14.6 / 370        | 17.9 / 455 | 7.7 / 195 | 6.7 / 170 | 37.5 / 17.0     | 11.7 / 5.3  |
| HDV 150P  | 14.6 / 370        | 17.9 / 455 | 7.7 / 195 | 6.7 / 170 | 43.0 / 19.5     | 10.1 / 4.6  |

## HDV – Available Amperes @ 25°C (77°F) Fully Charged

End Voltage 1.00V/Cell

| Cell Type | C5<br>Ah 1.10V | Seconds |      |      |      | Minutes |     |     |     |     |     | Hours |
|-----------|----------------|---------|------|------|------|---------|-----|-----|-----|-----|-----|-------|
|           |                | 1       | 5    | 15   | 30   | 1       | 5   | 10  | 15  | 20  | 30  | 1     |
| HDV 10P   | 10             | 118     | 100  | 97   | 92   | 85      | 61  | 48  | 37  | 29  | 21  | 11    |
| HDV 20P   | 20             | 237     | 200  | 193  | 187  | 170     | 122 | 96  | 73  | 58  | 41  | 22    |
| HDV 30P   | 30             | 355     | 300  | 290  | 275  | 254     | 184 | 143 | 110 | 87  | 62  | 34    |
| HDV 40P   | 40             | 473     | 400  | 386  | 366  | 339     | 244 | 191 | 146 | 116 | 83  | 45    |
| HDV 50P   | 50             | 592     | 501  | 483  | 459  | 424     | 306 | 239 | 184 | 145 | 104 | 57    |
| HDV 60P   | 60             | 710     | 600  | 579  | 550  | 508     | 366 | 287 | 220 | 174 | 124 | 67    |
| HDV 80P   | 80             | 946     | 800  | 772  | 734  | 677     | 488 | 383 | 294 | 232 | 166 | 90    |
| HDV 100P  | 100            | 1177    | 1000 | 965  | 916  | 835     | 612 | 479 | 366 | 290 | 208 | 112   |
| HDV 120P  | 120            | 1419    | 1199 | 1155 | 1100 | 1015    | 734 | 574 | 440 | 348 | 249 | 134   |
| HDV 150P  | 150            | 1771    | 1496 | 1441 | 1375 | 1265    | 917 | 717 | 550 | 435 | 311 | 168   |

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