

# NP SERIES

## VALVE REGULATED LEAD-ACID BATTERIES SHORTFORM BROCHURE



# RELIABILITY IS YOUR SECURITY

Yuasa NP, NPC and NPH Batteries  
Utilising the latest advance design Oxygen

Recombination Technology, Yuasa have applied their 75 years experience in the lead acid battery field to produce the optimum design of Sealed Lead Acid batteries

## Features

- Superb recovery from deep discharge
- Electrolyte suspension system
- Gas Recombination
- Multipurpose: Float or Cyclic use
- Usable in any orientation
- Superior energy density
- Lead calcium grids for extended life
- Manufactured World wide
- Application specific designs

## TECHNICAL FEATURES

### Sealed Construction

Yuasa's unique construction and sealing technique ensures no electrolyte leakage form case or terminals

### Electrolyte Suspension System

All NP batteries utilize Yuasa's unique electrolyte suspension system incorporating a microfine glass mat to retain the maximum amount of electrolyte in the cells. The electrolyte is retained in the separator material by meniscus effect and there is no free electrolyte to escape from the cells. No gels or other contaminants are added.

### Control of Gas Generation

The design of Yuasa's NP batteries incorporates the very latest oxygen recombination technology to effectively control the generation of gas during normal use.

### Low Maintenance Operation

Due to the perfect sealed construction and the recombination of gasses within the cell, the battery is almost maintenance free.

### Terminals

NP batteries are manufactured using a range of terminals which vary in size and type. Please refer to details as shown.

### Operation in any Orientation

The combination of sealed construction and Yuasa's unique electrolyte suspension system allows operation in any orientation, with no loss of performance or fear of electrolyte leakage. (Excluding continuous use inverted)

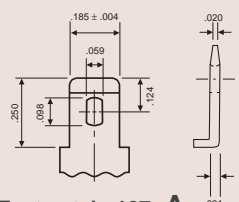
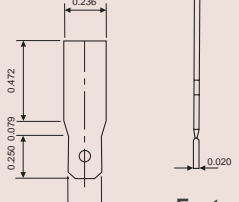
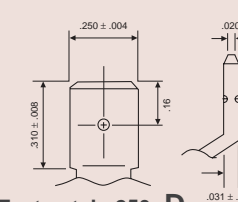
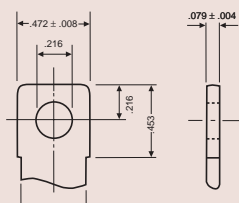
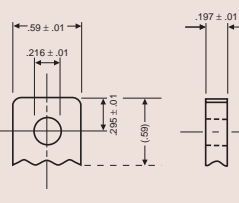
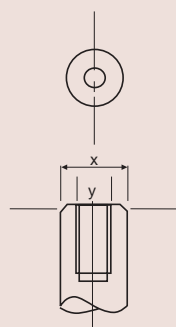
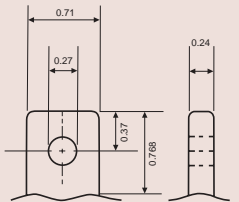
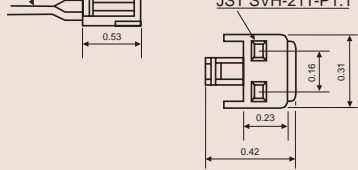
### Valve Regulated Design

The batteries are equipped with a simple, safe low pressure venting system which releases excess gas and automatically reseals should there be a build up of gas within the battery due to severe overcharge. However, on no account should the battery be charged in a sealed container.

### Lead Calcium Grids

The heavy duty lead calcium alloy grids provide an extra margin of performance and life in both cyclic and float applications and give unparalleled recovery from deep discharge.

## Terminals

 <p><b>Faston tab: 187 A</b></p> <table border="1"> <thead> <tr> <th colspan="2">INCH = MM</th> </tr> </thead> <tbody> <tr><td>.250</td><td>6.35</td></tr> <tr><td>.185</td><td>4.70</td></tr> <tr><td>.124</td><td>3.15</td></tr> <tr><td>.098</td><td>2.50</td></tr> <tr><td>.059</td><td>1.50</td></tr> <tr><td>.031</td><td>0.80</td></tr> <tr><td>.020</td><td>0.50</td></tr> <tr><td>.004</td><td>0.10</td></tr> </tbody> </table>	INCH = MM		.250	6.35	.185	4.70	.124	3.15	.098	2.50	.059	1.50	.031	0.80	.020	0.50	.004	0.10	 <p><b>Faston tab: 187 B</b></p> <table border="1"> <thead> <tr> <th colspan="2">INCH = MM</th> </tr> </thead> <tbody> <tr><td>0.472</td><td>12.00</td></tr> <tr><td>0.250</td><td>6.35</td></tr> <tr><td>0.236</td><td>6.00</td></tr> <tr><td>0.185</td><td>4.70</td></tr> <tr><td>0.079</td><td>2.00</td></tr> <tr><td>0.020</td><td>0.50</td></tr> </tbody> </table>	INCH = MM		0.472	12.00	0.250	6.35	0.236	6.00	0.185	4.70	0.079	2.00	0.020	0.50	 <p><b>Faston tab: 250 D</b></p> <table border="1"> <thead> <tr> <th colspan="2">INCH = MM</th> </tr> </thead> <tbody> <tr><td>.310</td><td>7.90</td></tr> <tr><td>.250</td><td>6.35</td></tr> <tr><td>.16</td><td>4.0</td></tr> <tr><td>.031</td><td>0.8</td></tr> <tr><td>.020</td><td>0.5</td></tr> </tbody> </table>	INCH = MM		.310	7.90	.250	6.35	.16	4.0	.031	0.8	.020	0.5
INCH = MM																																														
.250	6.35																																													
.185	4.70																																													
.124	3.15																																													
.098	2.50																																													
.059	1.50																																													
.031	0.80																																													
.020	0.50																																													
.004	0.10																																													
INCH = MM																																														
0.472	12.00																																													
0.250	6.35																																													
0.236	6.00																																													
0.185	4.70																																													
0.079	2.00																																													
0.020	0.50																																													
INCH = MM																																														
.310	7.90																																													
.250	6.35																																													
.16	4.0																																													
.031	0.8																																													
.020	0.5																																													
 <p><b>Bolt fastened terminal E</b></p> <table border="1"> <thead> <tr> <th colspan="2">INCH = MM</th> </tr> </thead> <tbody> <tr><td>472</td><td>12.00</td></tr> <tr><td>.453</td><td>11.50</td></tr> <tr><td>.433</td><td>11.00</td></tr> <tr><td>.216</td><td>5.50</td></tr> <tr><td>.079</td><td>2.00</td></tr> </tbody> </table>	INCH = MM		472	12.00	.453	11.50	.433	11.00	.216	5.50	.079	2.00	 <p><b>Bolt fastened terminal F</b></p> <table border="1"> <thead> <tr> <th colspan="2">INCH = MM</th> </tr> </thead> <tbody> <tr><td>.59</td><td>15.0</td></tr> <tr><td>.216</td><td>5.5</td></tr> <tr><td>.295</td><td>7.5</td></tr> <tr><td>.197</td><td>5.0</td></tr> </tbody> </table>	INCH = MM		.59	15.0	.216	5.5	.295	7.5	.197	5.0																							
INCH = MM																																														
472	12.00																																													
.453	11.50																																													
.433	11.00																																													
.216	5.50																																													
.079	2.00																																													
INCH = MM																																														
.59	15.0																																													
.216	5.5																																													
.295	7.5																																													
.197	5.0																																													
 <p><b>Bolt fastened terminal G</b></p> <table border="1"> <thead> <tr> <th colspan="2">INCH = MM</th> </tr> </thead> <tbody> <tr><td>0.24</td><td>6</td></tr> <tr><td>0.27</td><td>7</td></tr> <tr><td>0.37</td><td>9.5</td></tr> <tr><td>0.71</td><td>18</td></tr> <tr><td>0.768</td><td>19.5</td></tr> </tbody> </table>	INCH = MM		0.24	6	0.27	7	0.37	9.5	0.71	18	0.768	19.5	<p><b>JST No. VHR-2N I</b> WIRE AWG #20 UL 1007</p>  <p>JST No. VHR-2N (TERMINAL) JST SVH-21T-P1.1</p>	<table border="1"> <thead> <tr> <th>Terminal</th> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>J:</td> <td>17mm</td> <td>M5</td> </tr> <tr> <td>K:</td> <td>20mm</td> <td>M6</td> </tr> <tr> <td>L:</td> <td>10mm</td> <td>M5</td> </tr> </tbody> </table>	Terminal	x	y	J:	17mm	M5	K:	20mm	M6	L:	10mm	M5																				
INCH = MM																																														
0.24	6																																													
0.27	7																																													
0.37	9.5																																													
0.71	18																																													
0.768	19.5																																													
Terminal	x	y																																												
J:	17mm	M5																																												
K:	20mm	M6																																												
L:	10mm	M5																																												