



RANGE SUMMARY



Publication No: US-NP-RS-001 • March 2003

Sealed Rechargeable, Valve Regulated Lead-Acid Batteries

GENERAL SPECIFICATIONS

GENESIS / YUASA NPH SERIES

Type	FR Type*	Volts	Nominal Capacity (10 hr rate - Ah)	Length		Width		Overall Height Incl. Terminals		Weight		Layout	Terminals
				mm.	(in.)	mm	(in.)	mm.	(in.)	kgs.	(lbs.)		
NPH2-12	NPH2-12FR	12	2.0	68.0	2.68	51.0	2.01	88.0	3.46	0.84	1.85	2	A
NPH2.3-12	NPH2.3-12FR		2.3	178.0	7.01	34.0	1.34	64.0	2.52	0.94	2.07	1	A
NPH3.2-12	NPH3.2-12FR		3.2	134.0	5.28	67.0	2.64	64.0	2.52	1.40	3.09	3	A
NPH5-12	NPH5-12FR		SEE NPX-25										

GENESIS / YUASA NP SERIES

Type	FR Type*	Volts	Nominal Capacity (20 hr rate - Ah)	Length		Width		Overall Height Incl. Terminals		Weight		Layout	Terminals	
				mm.	(in.)	mm	(in.)	mm.	(in.)	kgs.	(lbs.)			
NP1.2-6	-	6	1.2	97.0	3.82	25.0	0.98	54.5	2.15	0.30	0.66	1	A	
NP3-6	-		3.0	134.0	5.28	34.0	1.33	64.0	2.52	0.65	1.43	1	A	
NP4-6	-		4.0	70.0	2.76	47.0	1.85	105.5	4.15	0.85	1.87	5	A	
NP7-6	NP7-6FR		7.0	151.0	5.95	64.0	1.33	97.5	3.84	1.35	2.98	1	A/D	
NP10-6	NP10-6FR		10.0	151.0	5.95	50.0	1.97	97.5	3.84	2.00	4.41	1	A/D	
NP12-6	NP12-6FR		SEE NPX-50											
NP0.8-12	NP0.8-12FR**	12	0.8	96.0	3.78	25.0	0.98	61.5	2.42	0.35	0.77	7	I/L	
NP1.2-12	-		1.2	97.0	3.82	48.0	1.89	54.5	2.15	0.57	1.25	3	A	
NP2-12	-		2.0	150.0	5.91	20.0	0.79	89.0	3.50	0.70	1.54	8	B	
-	NP2.3-12FR		2.3	178.0	7.01	34.0	1.34	64.0	2.52	0.94	2.07	1	A	
NP2.6-12	NP2.6-12FR		2.6	134.0	5.28	67.0	2.64	64.0	2.52	1.12	2.47	3	A	
NP4-12	NP4-12FR		4.0	90.0	3.54	70.0	2.76	106.0	4.17	1.70	3.74	1	A/D	
NP5-12	NP5-12FR		5.0	90.0	3.54	70.0	2.76	106.0	4.17	2.00	4.41	1	A/D	
NP7-12	NP7-12FR		7.0	151.0	5.94	65.0	2.56	97.5	3.84	2.65	6.17	4	A/D	
NP8.5-12	NP8.5-12FR		SEE NPX-35											
NP12-12	NP12-12FR		12.0	151.0	5.94	98.0	3.86	97.5	3.84	4.00	8.82	4	D	
NP18-12B	NP18-12BFR		17.2	181.0	7.13	76.2	2.99	167.0	6.57	6.20	13.64	2	E	
NP20-12	NP20-12FR		SEE NPX-80											
NP24-12	NP24-12FR		24.0	166.0	6.54	175.0	6.89	125.0	4.92	8.65	19.05	2	C	
NP28-12	NP28-12FR		SEE NPX-100											
NP33-12	NP33-12FR		32.9	195.3	7.69	132.6	5.22	155.2 [†]	6.11 [†]	10.9	24.00	1	M	
-	NP38-12B		38.0	197.0	7.74	165.0	6.50	175.0	6.89	13.80	30.40	2	J	
-	NP38-12R		38.0	197.0	7.74	165.0	6.50	175.0	6.89	13.80	30.40	2	K	
NP40-12	NP40-12FR		SEE NPX-150											
NP55-12	NP55-12FR		56.3	250.4	9.86	139.1	5.48	207.0 [†]	8.15 [†]	18.7	41.10	1	M	
NP65-12	NP65-12FR		65.0	350.0	13.78	166.0	6.54	174.0	6.85	22.80	50.20	2	G	
NP75-12	NP75-12FR	77.5	281.6	11.09	169.2	6.66	207.0 [†]	8.15 [†]	24.9	54.70	1	M		
NP100-12	NP100-12FR	91.6	330.9	13.03	169.2	6.66	207.0 [†]	8.15 [†]	29.8	65.70	1	M		

DATASAFE NPX SERIES

Type	FR Type*	Volts	W/Cell to 1.67 End Voltage (15 Min Rate)	Length		Width		Overall Height Incl. Terminals		Weight		Layout	Terminals
				mm.	(in.)	mm	(in.)	mm.	(in.)	kgs.	(lbs.)		
NPX-35-6	NPX-35-6/FR	6	35W/Cell	151.0	5.95	64.0	1.33	97.5	3.84	1.35	2.98	1	A/D
NPX-50	NPX-50/FR		50W/Cell	151.0	5.95	50.0	1.97	97.5	3.84	2.00	4.41	1	A/D
NPX-25	NPX-25/FR	12	23W/Cell	90.0	3.54	70.0	2.75	106.0	4.17	2.00	4.41	1	D
NPX-35	NPX-35/FR		35W/Cell	151.0	5.94	65.0	2.56	97.5	3.84	2.67	6.24	4	A/D
NPX-80	NPX-80/FR		80W/Cell	181.0	7.13	76.2	2.99	167.0	6.57	6.60	14.50	2	E
-	NPX-100B		95W/Cell	166.0	6.54	127.0	4.99	175.0	6.89	9.30	20.80	2	J
-	NPX-100R		95W/Cell	166.0	6.54	127.0	4.99	175.0	6.89	9.30	20.80	2	K
-	NPX-150B		150W/Cell	197.0	7.76	165.0	6.50	175.0	6.89	15.50	34.10	2	J
-	NPX-150R	150W/Cell	197.0	7.76	165.0	6.50	175.0	6.89	15.50	34.10	2	K	

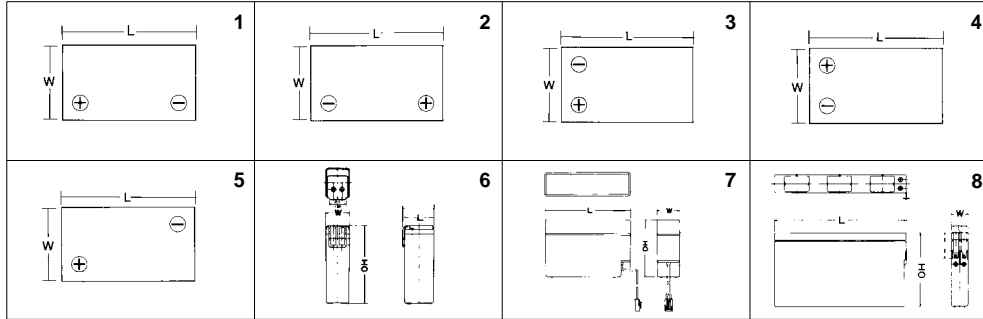
FOOTNOTES:

* FR: UL94-VO, Flame Retardant Case and Cover (Oxygen index: 30)
 ** FR: UL94-V2, Flame Retardant Case and Cover (Oxygen index: 30)
 ~ Recognized by UL File No. MH16464

† Height is to top of cover. Overall height, including terminal is dependent on terminal configuration.

• Recognized by UL File No. MH14328

LAYOUT



TERMINAL

<p>Faston tab: 187 A</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>Faston tab: 187 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>0.236</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	0.236	6.35	0.236	6.00	0.185	4.70	0.079	2.00	0.020	0.50	<p>Faston tab: 250 C</p> <table border="1"> <thead> <tr> <th colspan="2">INCH = MM</th> </tr> </thead> <tbody> <tr><td>.250 ± .004</td><td>.250 6.35</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> </tbody> </table>	INCH = MM		.250 ± .004	.250 6.35	.124	3.15	.098	2.50	.059	1.50	.031	0.80	.020	0.50	<p>Faston tab 250 D</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
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<p>U Negative Terminal</p>	<p>MG Negative</p>	<p>Automotive Type AP Negative</p>	<p>B Terminal</p>																																																										

Charging

- Standby use: Apply constant voltage charging at 2.275 volts per cell (or 2.25–2.30VPC).
- Cyclic use: Apply constant voltage charging at 2.40–2.50 VPC. Initial charging current should be set at less than 0.25CA.
- Top charge: Product in storage (ambient temperature 25°C/77°) requires a top charge every six months. Apply constant voltage at 2.40 volts per cell, initial charging current should be set at less than 0.1CA for 15 to 20 hours.

Discharge

- Stop operation when voltage has reached the minimum permissible voltage. Recharge immediately.
- Do not operate at 6CA or more current continuously.

Storage

- Always store battery in a fully charged condition.
- If battery is to be stored for a long period, apply a recovery top-charge every 6 months.
- Store batteries in a dry and cool location.

Temperature

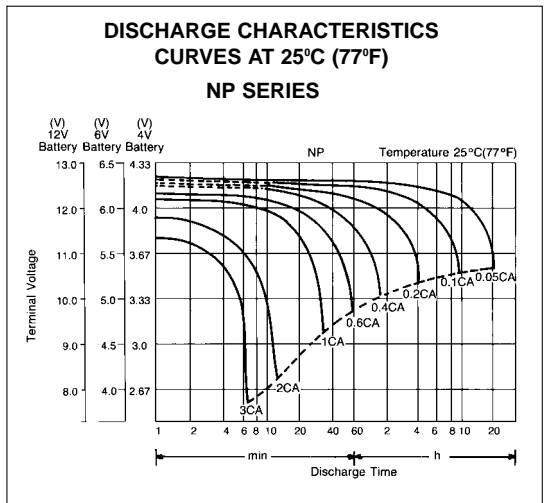
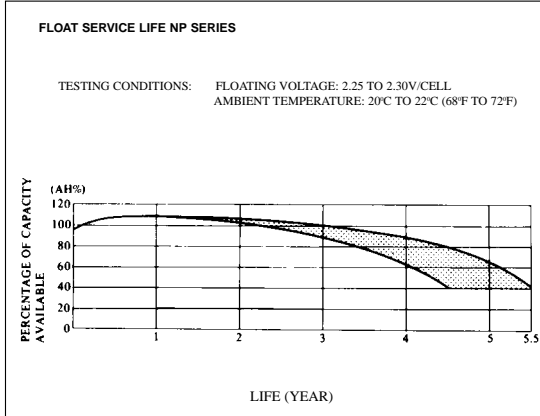
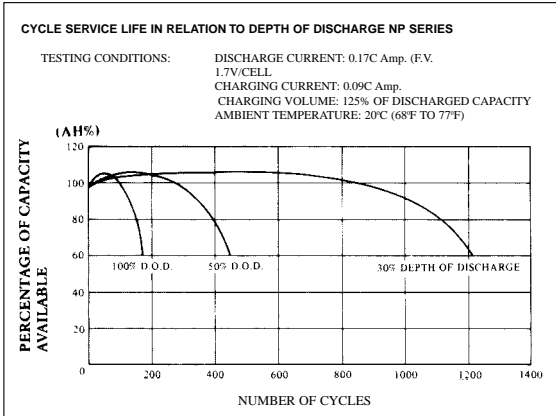
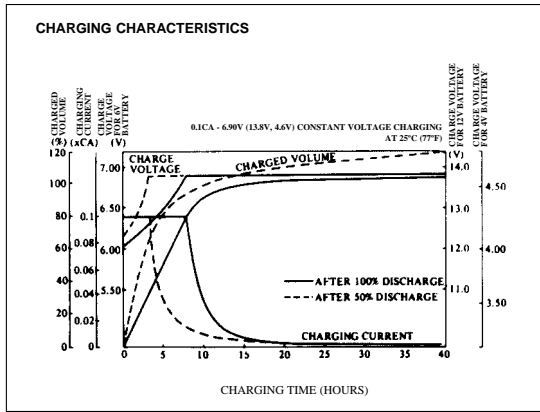
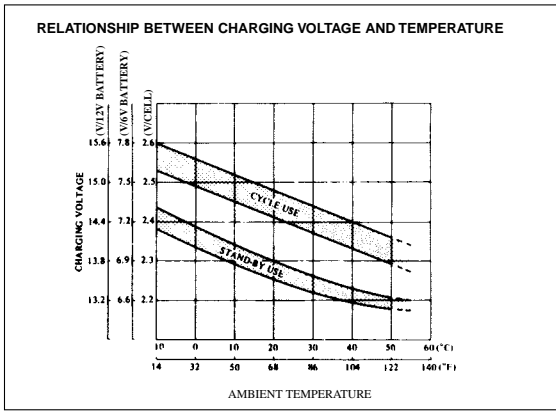
- Keep within ambient temperatures of -15°C to $+50^{\circ}\text{C}$ for both charging and discharging.

Incorporating battery into equipment

- Encase battery in a well ventilated compartment.
- Avoid installing battery near heated units such as a transformer.
- House the battery in the lowest section of the equipment enclosure or rack to prevent unnecessary battery temperature rise.

Others

- Avoid terminal short circuit.
- DO NOT expose to open flame.
- Avoid setting batteries in environments which can cause direct contact to gasoline, paint thinner, organic solvents, synthetic resins, oil, etc.



• If discharge currents in excess of 3C are required, consult an EnerSys engineer prior to use.

Limited Warranty:

Each Genesis NP Series battery which is sold is warranted against defects in workmanship and materials for a period of one year from the date of manufacture. Under this warranty, our obligation will be limited to the repair or replacement of the battery. Such repair or replacement will be FOB our warehouse in Santa Fe Springs, California or other designated location that EnerSys Inc. may designate. Such repair or replacement will be made only after our examination determines that said battery is defective in material and/or workmanship. We exempt from any warranty claims any battery which has been subjected to misuse, abuse, alteration, or any battery that may have been repaired or attempts made for repair by other than EnerSys Inc. THIS WARRANTY MADE IN LIEU OF ALL OTHER WARRANTIES WITH RESPECT TO THE PRODUCT COVERED HEREBY AND THERE ARE NO OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, OR MERCHANTABILITY OR OTHERWISE EXCEPT THE WARRANTY EXPRESSLY STATED HEREIN. THE REMEDY SET FORTH HEREIN SHALL BE THE SOLE EXCLUSIVE REMEDY OF ANY PURCHASER WITH RESPECT TO ANY DEFECTIVE PRODUCT, UNDER NO CIRCUMSTANCES SHALL WE BE LIABLE FOR ANY INJURY, LOSS, DAMAGE, OR EXPENSE SUFFERED OR INCURRED WITH RESPECT TO ANY DEFECTIVE PRODUCT.



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