genesis™ NP

RANGE SUMMARY

EnerSys™
Power/Full Solutions

Publication No: US-NP-RS-003 • August 2006

GENERAL SPECIFICATIONS

GENESIS NPH SERIES

Type	FR Type*	Volts	Nominal Capacity (10 hr rate - Ah)	Length mm.	Length (in.)	Width mm	Width (in.)	Overall Height Incl. Terminals mm.	Overall Height Incl. Terminals (in.)	Weight kgs.	Weight (lbs.)	Layout	Terminals
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
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

GENESIS NP SERIES

Type	FR Type*	Volts	Nominal Capacity (20 hr rate - Ah)	Length mm.	Length (in.)	Width mm	Width (in.)	Overall Height Incl. Terminals mm.	Overall Height Incl. Terminals (in.)	Weight kgs.	Weight (lbs.)	Layout	Terminals
NP1.2-6	NP1.2-6FR	6	1.2	97.0	3.82	25.0	0.98	54.5	2.15	0.30	0.66	1	A
NP2.8-6	NP2.8-6FR		2.8	67.0	2.64	34.0	1.34	105.0	4.13	0.59	1.30	5	A/D
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
NP4.5-6	-		4.5	70.0	2.76	47.0	1.85	107.0	4.21	0.87	1.92	5	A
NP5-6	NP5-6FR		5.0	70.0	2.76	47.0	1.85	107.0	4.21	0.93	2.05	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
NP8.5-6	-		8.5	98.0	3.86	56.0	2.21	118.0	4.65	1.60	3.53	9	A
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		12.0	151.0	5.95	50.0	1.97	101.0	3.98	2.07	4.56	1	A/D
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
NP2-12-C	-		2.0	182.0	7.17	23.5	0.93	61.0	2.40	0.73	1.61	6	TU
-	NP2.3-12FR		2.3	178.0	7.01	34.0	1.34	64.0	2.52	0.94	2.07	1	A
-	NP2.6-12FR		2.6	134.0	5.28	67.0	2.64	64.0	2.52	1.12	2.47	3	A
NP2.9-12	NP2.9-12FR		2.9	79.0	3.11	56.0	2.20	105.0	4.13	1.21	2.67	2	A/D
NP3-12	NP3-12FR		3.0	132.0	5.20	33.0	1.30	104.5	4.11	1.20	2.65	1	A/D
NP3.4-12	NP3.4-12FR		3.4	134.0	5.28	67.0	2.64	67.0	2.64	1.37	3.02	3	A/D
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
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
NP24-12	NP24-12FR		24.0	166.0	6.54	175.0	6.89	125.0	4.92	8.65	19.05	2	C
NP33-12	NP33-12FR		32.9	195.3	7.69	132.6	5.22	155.2†	6.11†	10.90	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
NP55-12	NP55-12FR		56.3	250.4	9.86	139.1	5.48	207.0†	8.15†	18.70	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†	24.90	54.70	1	M
NP90-12	NP90-12FR		90.0	304.0	11.97	168.0	6.61	229.0	9.12	30.50	67.24	1	G
NP100-12	NP100-12FR		91.6	330.9	13.03	169.2	6.66	207.0†	8.15†	29.80	65.70	1	M
NP120-12	NP120-12FR		120.0	407.0	16.02	173.0	6.81	234.5	9.23	41.30	91.05	1	G
NP150-12	NP150-12FR		150.0	483.0	19.02	170.0	6.69	241.0	9.49	46.80	103.17	1	G
NP200-12	NP200-12FR		200.0	520.0	20.47	260.0	10.24	240.0	9.45	74.00	163.10	3	G

DATASAFE NPX SERIES

Type	FR Type*	Volts	W/Cell to 1.67 End Voltage (15 Min Rate)	Length mm.	Length (in.)	Width mm	Width (in.)	Overall Height Incl. Terminals mm.	Overall Height Incl. Terminals (in.)	Weight kgs.	Weight (lbs.)	Layout	Terminals
NPX-50	NPX-50FR	6	50W/Cell	151.0	5.95	50.0	1.97	97.5	3.84	2.00	4.41	1	A/D
NPX-25	NPX-25FR	12	23W/Cell	90.0	3.54	70.0	2.75	106.0	4.17	2.00	4.41	1	D
NPX-35	NPX-35FR		35W/Cell	151.0	5.94	65.0	2.56	97.5	3.84	2.67	6.24	4	A/D
NPX-80	NPX-80FR		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	125.0	4.92	175.0	6.89	9.30	20.80	2	J
-	NPX-100R		95W/Cell	166.0	6.54	125.0	4.92	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 cover. Overall height, including terminal is dependent on terminal configuration.

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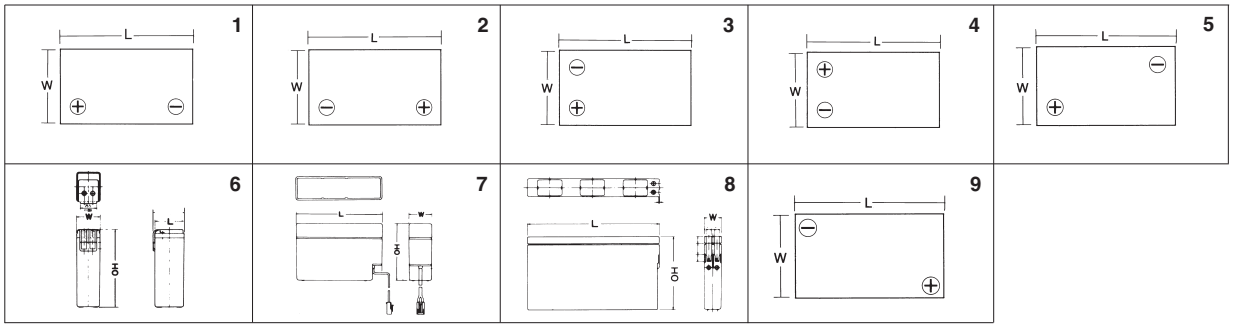
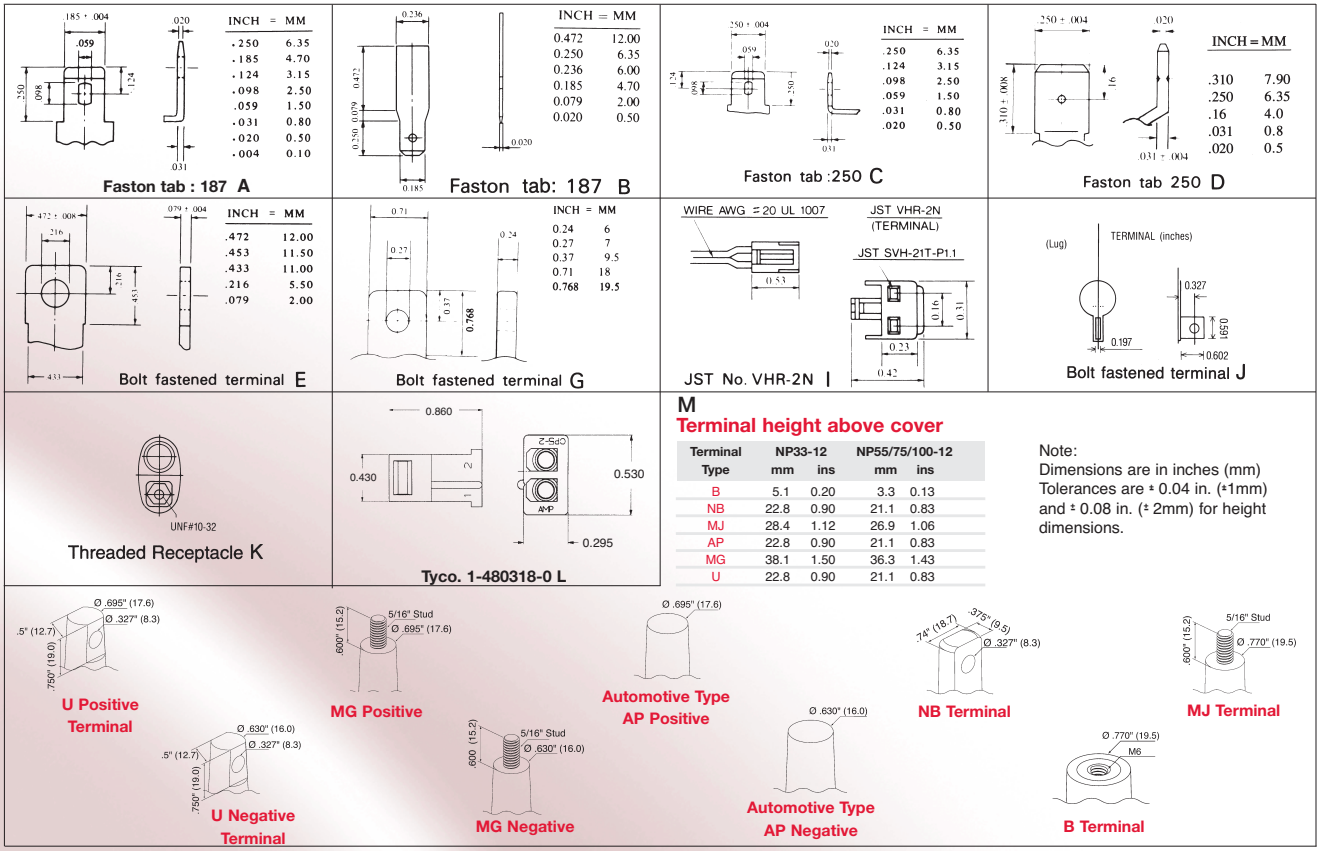
• LAYOUT



• TERMINAL



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°C for both charging and discharging.

Incorporating battery into equipment

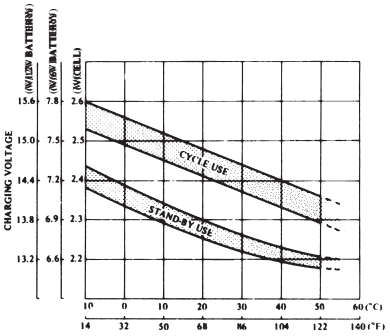
- Encase battery in a well ventilated compartment.
- Avoid installing battery near heated units such as a transformer.
- House the battery in the lowest section of the equipment enclosure or rack to prevent unnecessary battery temperature rise.

Others

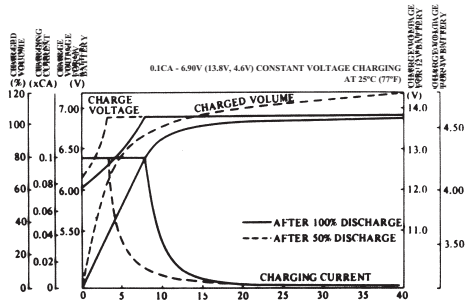
- Avoid terminal short circuit.
- DO NOT expose to open flame.
- Avoid setting batteries in environments which can cause direct contact to gasoline, paint thinner, organic solvents, synthetic resins, oil, etc.

Publication No: US-NP-RS-003 • August 2006

RELATIONSHIP BETWEEN CHARGING VOLTAGE AND TEMPERATURE

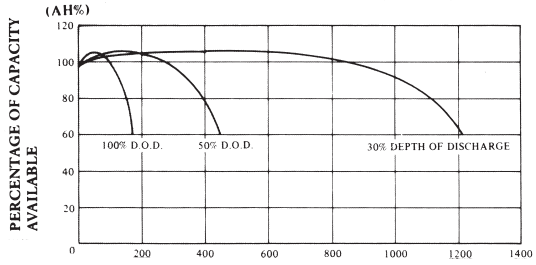


CHARGING CHARACTERISTICS



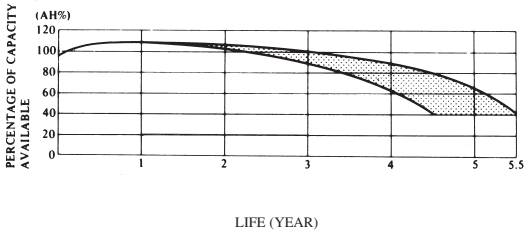
CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE NP SERIES

TESTING CONDITIONS: DISCHARGE CURRENT: 0.17C Amp. (F.V. 1.7V/CELL
CHARGING CURRENT: 0.09C Amp.
CHARGING VOLUME: 125% OF DISCHARGED CAPACITY
AMBIENT TEMPERATURE: 20ºC (68ºF TO 77ºF)

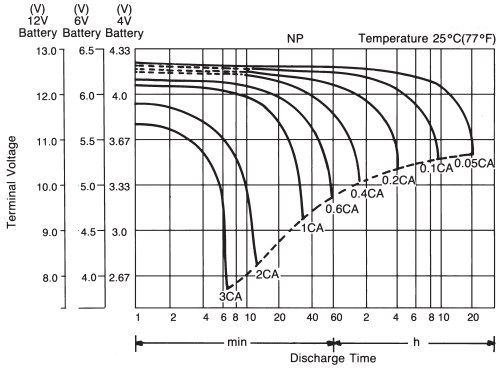


FLOAT SERVICE LIFE NP SERIES

TESTING CONDITIONS: FLOATING VOLTAGE: 2.25 TO 2.30V/CELL
AMBIENT TEMPERATURE: 20ºC TO 22ºC (68ºF TO 72ºF)



DISCHARGE CHARACTERISTICS CURVES AT 25ºC (77ºF) NP SERIES



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

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