

Battery Range Summary

Genesis® NP batteries feature heavy duty thick lead-calcium grids for years of dependable performance. The high energy density design, factory sealed case and leak-proof construction ensures that these rechargeable sealed lead acid batteries are extremely reliable and maintenance-free.

The batteries are completely sealed by the factory, meaning zero watering requirements. The Genesis NP battery design includes a low pressure relief valve to release any build-up of pressure within the case. This vent is completely self-sealing ensuring the highest possible rate of internal recombination is reached within each battery.

With an expected life span of three to five years in float applications at 77°F (25°C) ambient temperature, more than 1,000 discharge/recharge cycles can be realized depending on the DOD for each cycle. The internal grid design has been perfected over 10 decades of battery experience to yield a battery that can recover even after repeated deep discharges.

Features and Benefits

- Capacity range 1.2 - 33Ah
- Lead calcium alloy
- Sealed design, no watering required
- 1,000+ cycles can be realized depending on Depth of Discharge (DOD)
- Heavy duty grids maximize life
- Three to five year life expectancy in float applications at 77°F (25°C) ambient temperature

Construction

- Heavy duty thick lead-calcium grids
- Sealed case for leak-proof operation
- Designed to promote internal recombination for longer life
- Integral pressure relief valve operates at 2-3 PSI and is self-resealing

Installation and Operation

- Space efficient footprint
- Compact, quick and simple installation process
- Three to five year life expectancy in float applications at 77°F (25°C) ambient temperature
- Low maintenance - no watering required
- Operating temperature: -5°F (-15°C) to 122°F (50°C); Recommended temperature: 68°F (20°C) to 86°F (30°C)

Standards

- Approved for air transportation (IATA A67)
- Recognized by UL File no. MH16464 and MH15740
- Non-spillable classification (UN2800)
- IEC 61056-1, IEC 60896-21 and IEC60896-22 compliant

General Specifications

Genesis® NP Battery Series

Battery Type	FR Battery Type*	Volts	Nominal Capacity 20hr rate-Ah¹	Nominal Dimensions						Typical Weight		Layout	Terminal Illustration	Electrolyte (1.300 SG)				Internal Resistance (mΩ)	Short Circuit (A)
				Length		Width		Height ‡						Volume		Volume			
				in	mm	in	mm	in	mm	lbs	kg			gal	L	lbs	kg		
NP4-6	n/a	6	4.0	2.76	70	1.85	47	4.15	105	1.76	0.80	5	A	0.038	0.14	0.41	0.19	20	315
NP4.5-6	n/a	6	4.5	2.76	70	1.85	47	4.15	105	1.80	0.82	5	A	0.040	0.15	0.43	0.20	19	330
NP5-6	n/a	6	5.0	2.76	70	1.85	47	4.15	105	1.83	0.83	5	A	0.046	0.17	0.49	0.22	18	350
NP7-6	n/a	6	7.0	5.95	151	1.30	33	3.94	100	2.76	1.25	1	A	0.065	0.25	0.70	0.32	15	415
NP12-6	n/a	6	12.0	5.95	151	1.97	50	3.98	101	4.23	1.92	1	A	0.100	0.38	1.08	0.49	8	780
NP1.2-12	n/a	12	1.2	3.82	97	1.89	48	2.20	56	1.25	0.57	3	A	0.025	0.09	0.27	0.12	120	105
NP2-12	n/a	12	2.0	5.91	150	0.79	20	3.50	89	1.54	0.70	6	B	0.034	0.13	0.37	0.17	80	155
n/a	NP2.3-12FR	12	2.3	7.01	178	1.38	35	2.64	67	2.23	1.01	1	A	0.036	0.14	0.39	0.18	65	190
NP2.9-12	n/a	12	2.9	3.11	79	2.20	56	4.13	105	2.73	1.24	1	A	0.053	0.20	0.57	0.26	57	220
NP4-12	n/a	12	4.0	3.54	90	2.76	70	4.21	107	3.74	1.70	1	A	0.075	0.28	0.81	0.37	38	330
NP5-12	n/a	12	5.0	3.54	90	2.76	70	4.21	107	3.88	1.76	1	A	0.085	0.32	0.92	0.42	35	355
NP5-12T	n/a	12	5.0	3.54	90	2.76	70	4.21	107	3.88	1.76	1	C	0.085	0.32	0.92	0.42	35	355
NP7-12	NP7-12FR	12	7.0	5.95	151	2.56	65	3.94	100	5.29	2.40	4	A	0.120	0.45	1.30	0.59	30	415
NP7-12T	NP7-12TFR	12	7.0	5.95	151	2.56	65	3.94	100	5.29	2.40	4	C	0.120	0.45	1.30	0.59	30	415
NP9-12T	NP9-12TFR	12	9.0**	5.95	151	2.56	65	3.94	100	5.94	2.69	4	C	0.148	0.56	1.60	0.73	14	650
NP12-12T	NP12-12TFR	12	12.0	5.95	151	3.86	98	3.94	100	8.26	3.75	4	C	0.180	0.68	1.95	0.88	16	780
NP18-12B	NP18-12BFR	12	17.2	7.13	181	3.00	76	6.57	167	13.6	6.17	2	D	0.280	1.06	3.03	1.38	13	960
n/a	NP33-12BFR	12	33.0	7.76	197	5.16	131	6.22	158	25.1	11.39	1	E	0.480	1.82	5.20	2.36	9	1440

General Specifications Continued

DataSafe® NPX Battery Series

Battery Type	FR Battery Type*	Volts	Watts/Cell to 1.67 End Voltage	Nominal Capacity 20hr rate-Ah ¹	Nominal Dimensions						Typical Weight				Layout	Terminal Illustration	Electrolyte (1.300 SG)				Internal Resistance (mΩ)	Short Circuit (A)
					Length		Width		Height ‡		lbs		kg				Volume		Volume			
					in	mm	in	mm	in	mm	lbs	kg	gal	L			lbs	kg				
n/a	NPX-25TFR	12	23W/Cell	5.0	3.54	90	2.75	70	4.21	107	4.30	1.95	1	C	0.065	0.25	0.70	0.32	16.5	300		
n/a	NPX-35FR	12	35W/Cell	8.0	5.95	151	2.56	65	3.94	100	6.06	2.75	4	A	0.102	0.39	1.10	0.50	13.2	500		
n/a	NPX-35TFR	12	35W/Cell	8.0	5.95	151	2.56	65	3.94	100	6.06	2.75	4	C	0.102	0.39	1.10	0.50	13.2	500		

[†] Amp Hour rate is subject to change without notice.

* FR: UL94-V0, Flame Retardant Case and Cover (Oxygen index 28)

** Nominal capacity 10hr rate-Ah

‡ Height is top cover. Overall height, including terminal is dependent on the terminal configuration.

Note: All dimensions are +/- 0.08 inches (2mm); Weights are +/- 5%

Torque Specifications:

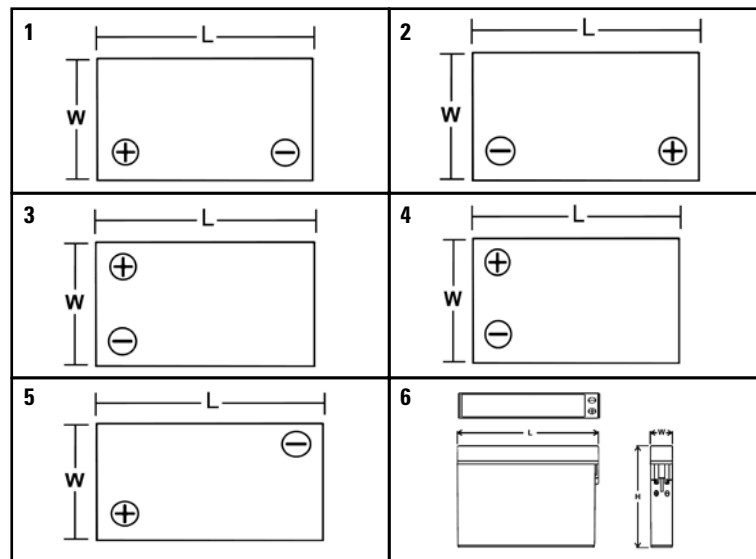
M5 Bolt: 26.6 lbf.in (3Nm) +/- 5%

M6 Bolt: 44.31 lbf.in (5Nm) +/- 5%

Terminal Illustrations

A <p>0.187 ± .004 0.059 0.098 0.124 0.020 0.031</p>	in. (mm) 0.250 (6.35) 0.187 (4.75) 0.124 (3.15) 0.098 (2.49) 0.059 (1.50) 0.031 (0.79) 0.020 (0.51) 0.004 (0.10)	B <p>0.236 0.472 0.079 0.020 0.031</p>	in. (mm) 0.472 (11.99) 0.250 (6.35) 0.236 (5.99) 0.187 (4.75) 0.130 (3.30) 0.079 (2.01) 0.020 (0.51)	C <p>0.250 ± .004 0.059 0.098 0.130 0.020 0.031</p>	in. (mm) 0.313 (7.95) 0.250 (6.35) 0.180 (4.57) 0.098 (2.49) 0.059 (1.50) 0.031 (0.79) 0.020 (0.51) 0.004 (0.10)	D <p>0.472 Ø 0.217 0.453 0.079 0.027</p>	in. (mm) 0.472 (11.99) 0.453 (11.51) 0.217 (5.51) 0.079 (2.01)
Faston Tab 187		Faston Tab: 187 (F1)		"T" Faston Tab: 250 (F2)		"B" M5 Bolt Fastened Terminal	
E <p>0.591 Ø 0.256 0.236 0.709</p>	in. (mm) 0.709 (18.01) 0.551 (14.00) 0.256 (6.50) 0.236 (5.99)	Part Number Reference: "T" = 0.250 in wide (reference C) "B" = Bolt-On (reference D and E) Terminal Tolerances are: ±0.02 in. for dimensions < 5mm ±0.04 in. for dimensions ≥ 5mm ±0.08 in. for all height dimensions unless otherwise specified					
"B" M6 Bolt Fastened Terminal							

Layout Illustrations



Charging

- Standby use: Apply constant voltage charging at 2.28 volts per cell (or 2.25-2.30 Vpc)
- 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 77°F (25°C)) requires a top charge every six months. Apply constant voltage at 2.40 Vpc, initial charging should be set at less than 0.1CA for 15-20 hours

Discharge

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

*Reference EnerSys Publication No. US-NP-AM

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 5°F (-15°C) to 122°F (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 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
- **WARNING:** Avoid exposure of the battery to any type of oil, solvent, detergent, petroleum-based solvent or ammonia solutions. These materials could potentially cause permanent damage to the battery jar and cover and will void the warranty



Power/Full Solutions

EnerSys World Headquarters
2366 Bernville Road
Reading, PA 19605, USA
Tel: +1-610-208-1991 /
+1-800-538-3627

EnerSys EMEA
EH Europe GmbH
Baarerstrasse 18
6300 Zug, Switzerland

EnerSys Asia
No. 85, Tuas Avenue 1
Singapore 639518
Tel: +65 6558 7333