



## 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 virtually maintenance-free.

The batteries are completely sealed, 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-resealing ensuring the highest possible rate of internal recombination is reached within each battery.

Genesis NP batteries are designed to operate in standby (float) applications for 3 to 5 years. They can be operated over a wide temperature range and can recover even after repeated deep discharges.

### Features & Benefits

- High energy density
- Wide capacity range
- Sealed design; low maintenance and no watering required
- Heavy duty grids maximize life
- 3 to 5 year life expectancy
- Suitable for a wide range of applications

## 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 which is self-resealing
- Flame retardant UL94-V0 case and cover available

## Installation & Operation

- Space efficient footprint
- Compact, quick and simple installation process
- Three to five year life expectancy in float applications at 25°C ambient temperature
- Low maintenance - no watering required
- Wide operating temperature range: -15°C to 50°C.  
Recommended temperature: 20°C to 30°C

## Standards

- UL Recognised component (UL File No. MH16464 & MH15740)
- Classified as non-spillable battery and approved as non-hazardous cargo for land, sea and air transportation in accordance with the requirements of ADR / RID, IMDG and IATA respectively
- Designed to be compliant with IEC 61056-1 and 60896-21/22
- The management systems governing the manufacture of Genesis NP products are ISO 9001:2008 and ISO 14001:2004 certified

## General Specifications

### Genesis® NP Battery Series

Battery Type	FR Battery Type*	Volts (V)	Nominal Capacity (Ah) C <sub>20</sub> rate to 1.85Vpc @ 25°C	Nominal Dimensions (mm)			Typical Weight (kg)	Layout	Terminal
				Length	Width	Height‡			
NP1.2-6	NP1.2-6FR	6	1.2	97	25	56	0.30	2	A
NP3-6	NP3-6FR	6	3.0	134	33	67	0.69	2	A
NP4-6	NP4-6FR	6	4.0	70	47	105	0.80	5	A
NP7-6	NP7-6FR	6	7.0	151	33	100	1.25	1	A
NP10-6	NP10-6FR	6	10.0	151	50	101	1.73	1	A
NP12-6	NP12-6FR	6	12.0	151	50	101	1.92	1	A/C
NP0.8-12	NP0.8-12FR	12	0.8	96	25	61	0.37	7	H
NP1.2-12	NP1.2-12FR	12	1.2	97	48	56	0.57	4	A
NP2-12	NP2-12FR	12	2.0	150	20	89	0.70	8	A
NP2-12-C	NP2-12-CFR	12	2.0	182	24	61	0.73	6	L
NP2.3-12	NP2.3-12FR	12	2.3	178	35	67	1.01	1	A
NP2.9-12	NP2.9-12FR	12	2.9	79	56	105	1.24	2	A
NP3.4-12	NP3.4-12FR	12	3.4	134	67	67	1.39	3	A
NP4-12	NP4-12FR	12	4.0	90	70	107	1.70	1	A
NP5-12	NP5-12FR	12	5.0	90	70	107	1.76	1	A/C
NP7-12	NP7-12FR	12	7.0	151	65	100	2.40	4	A/C
NP9-12	NP9-12FR	12	9.0	151	65	100	2.69	4	A
NP10-12	NP10-12FR	12	9.5	151	65	118	3.27	4	A
NP12-12	NP12-12FR	12	12.0	151	98	100	3.75	4	C
NP18-12	NP18-12FR	12	17.2	181	76	167	5.40	2	E
NP22-12	N/A	12	20.9	181	76	167	6.90	2	G
NP24-12	NP24-12FR	12	24.0	166	175	125	8.68	2	D/E
NP33-12	NP33-12FR	12	33.0	197	131	158‡	11.39	1	E
NP38-12	NP38-12FR	12	38.0	197	165	172	13.53	2	E/G
NP55-12	NP55-12FR	12	55.0	229	138	207‡	18.50	1	G
NP65-12	NP65-12FR	12	65.0	350	166	174	22.72	2	G
NP75-12	NP75-12FR	12	75.0	259	168	208‡	25.85	1	G
NP90-12	NP90-12FR	12	90.0	304	168	208‡	30.17	1	G
NP100-12	NP100-12FR	12	100.0	329	174	214‡	32.94	1	G
NP120-12	NP120-12FR	12	120.0	407	173	235	38.41	1	G
NP150-12	NP150-12FR	12	150.0	483	170	241‡	47.13	1	G
NP200-12	NP200-12FR	12	200.0	522	260	208‡	63.60	3	G

### DataSafe® NPX Battery Series

Battery Type	FR Battery Type*	Volts (V)	Watts/Cell (Wpc) 15min rate to 1.67Vpc @ 25°C	Nominal Capacity (Ah) C <sub>20</sub> rate to 1.85Vpc @ 25°C	Nominal Dimensions (mm)			Typical Weight (kg)	Layout	Terminal
					Length	Width	Height‡			
NPX50-6	NPX50-6FR	6	50W/Cell	13	151	50	100	2.09	1	C
NPX24-12	NPX24-12FR	12	24W/Cell	6	151	51	100	2.28	4	Neg A/Pos C
NPX25-12	NPX25-12FR	12	23W/Cell	5	90	70	107	1.95	1	C
NPX35-12	NPX35-12FR	12	36W/Cell	8.5	151	65	100	2.75	4	A/C
NPX80-12	NPX80-12FR	12	80W/Cell	20	181	76	167	6.29	2	E
NPX100-12	NPX100-12FR	12	95W/Cell	28	166	125	175	9.70	2	E
NPX135-12	NPX135-12FR	12	135W/Cell	33	197	131	158‡	11.94	1	E
NPX150-12	NPX150-12FR	12	150W/Cell	40	197	165	172	14.29	2	G

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

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

Note: All dimensions are +/- 2mm; Weights are +/- 5%

Torque Specifications:

M5 Bolt: 3Nm +/- 5%

M6 Bolt: 5Nm +/- 5%

M5 Receptacle: 4Nm +/- 5%

M6 Receptacle: 6.8Nm +/- 5%

## Terminal

<b>A</b> 	<b>mm</b> 6.35 4.75 3.15 2.49 1.50 0.79 0.51 0.10	<b>C</b> 	<b>mm</b> 7.95 6.35 4.57 2.49 1.50 0.79 0.51 0.10	<b>D</b> 	<b>mm</b> 11.99 11.51 5.51 2.01	<b>E</b> 
<b>Faston Tab 187</b>		<b>Faston Tab: 187 (F1)</b>		<b>"T" Faston Tab: 250 (F2)</b>		<b>"R" M5 Threaded Receptacle</b>
<b>G</b> 	<b>H</b> 	<b>I</b> 	<b>mm</b> 21.84 13.46 10.92 7.49	<b>L</b> 	<b>mm</b> 22.01 13.97 10.92 5.84	
<b>"R" M6 Threaded Receptacle</b>		<b>JST No. VHR-2N</b>		<b>(W) Tyco. 1-480318-0</b>		<b>"Camcorder" Terminal</b>

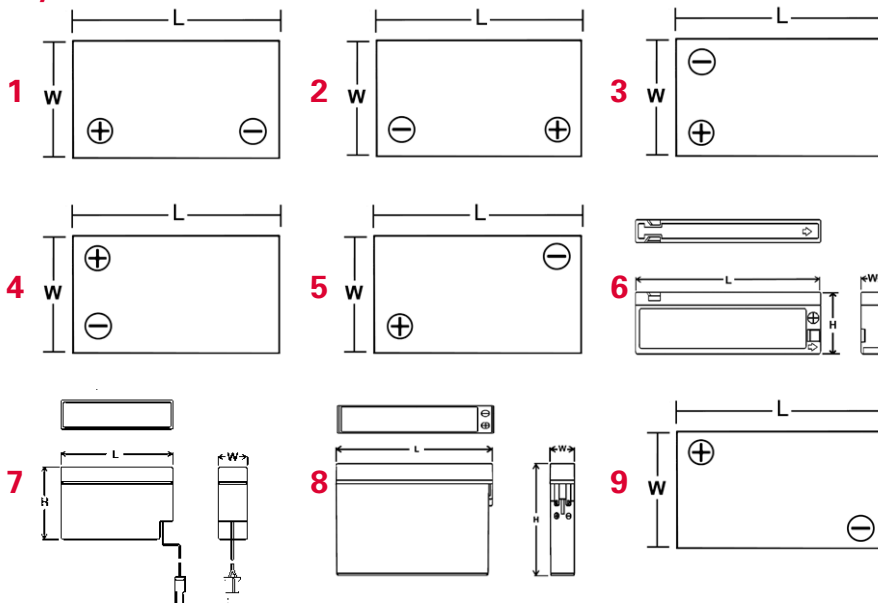
### Part Number Reference:

"T" = 0.250" wide (reference C)  
 "R" = Receptacle (reference E and G)  
 "B" = Bolt-On (reference D)  
 "W" = Wide (reference I)

### Terminal Tolerances are:

+/- 0.5mm for dimensions <5mm  
 +/- 1mm for dimensions ≥5mm  
 +/- 2mm for all height dimensions UOS

## Layout



## 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

- Install 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

## Charging

- Standby use: Apply constant voltage charging at 2.28 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 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 Genesis NP Application Manual

## 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.



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