



*Powerful solutions for industrial applications*



## General Specifications

### Genesis® NP Battery Series

Battery Types	FR Type*	Volts	Nominal Capacity (20hr rate-Ah)	Length mm	Width mm	Overall Height (inc. terminals) mm	Weight kgs.	Layout (including terminals)	^Terminal Illustration
NP1.2-6	NP1.2-6FR	6	1.2	97	25	56	0.30	1	A
NP2.8-6	NP2.8-6FR	6	2.8	67	33	105	0.59	2	A
NP3-6	NP3-6FR	6	3.0	134	33	67	0.69	1	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	1.28	1	A
NP10-6	NP10-6FR	6	10.0	151	50	101	1.99	1	A
NP12-6	NP12-6FR	6	12.0	151	50	101	2.03	1	C
NP0.8-12	NP0.8-12FR	12	0.8	96	25	61	0.37	7	H/I
NP1.2-12	NP1.2-12FR	12	1.2	97	48	56	0.57	3	A
NP2-12	NP2-12FR	12	2.0	150	20	89	0.70	8	B
NP2-12C	NP2-12CFR	12	2.0	182	24	61	0.73	6	D
NP2.3-12	NP2.3-12FR	12	2.3	178	35	67	0.98	1	A
NP2.9-12	NP2.9-12FR	12	2.9	79	56	105	1.24	1	A
NP3.4-12	NP3.4-12FR	12	3.4	134	67	67	1.39	3	A
NP5-12	NP5-12FR	12	5.0	90	70	107	1.81	1	A/C
NP7-12	NP7-12FR	12	7.0	151	65	100	2.59	4	A/C
NP10-12	NP10-12FR	12	9.5	151	65	118	3.27	4	A
NP12-12	NP12-12FR	12	12.0	151	98	100	4.06	4	C
NP18-12	NP18-12FR	12	17.2	181	76	167	6.17	2	E/G
NP24-12	NP24-12FR	12	24.0	166	175	125	9.07	2	E/G
NP33-12	NP33-12FR	12	33.0	197	131	158+	11.79	1	E/G
NP38-12	NP38-12FR	12	38.0	197	165	172	14.59	2	G
NP55-12	NP55-12FR	12	55.0	229	138	207+	18.01	1	G
NP65-12	NP65-12FR	12	65.0	350	166	174	23.63	2	G
NP75-12	NP75-12FR	12	75.0	259	169	208+	26.50	1	G
NP90-12	NP90-12FR	12	90.0	304	168	229	31.18	1	G
NP100-12	NP100-12FR	12	100.0	329	174	214+	32.50	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	44.50	1	G
NP200-12	NP200-12FR	12	200.0	522	240	218+	64.50	3	G

### DataSafe® NPX Battery Series

Battery Types	FR Type*	Volts	15 minute watts per cell to 1.67Vpc	Nominal Capacity (20hr rate-Ah)	Length mm	Width (inc. terminals) mm	Overall Height (inc. terminals) mm	Weight kgs.	Layout (including terminals)	^Terminal Illustration
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	35W/Cell	8	151	65	100	2.75	4	A/C
NPX80-12	NPX80-12FR	12	80W/Cell	20	181	76	167	6.35	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	130	158+	11.94	1	E
NPX150-12	NPX150-12FR	12	150W/Cell	40	197	165	172	14.29	2	G

#### FOOTNOTES:

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

+ Height is to the top of the cover. Overall Height, including terminal is dependent on the terminal configuration

^ Terminal availability is subjected to confirmation at point of order

Recognized by UL File No. MH16464

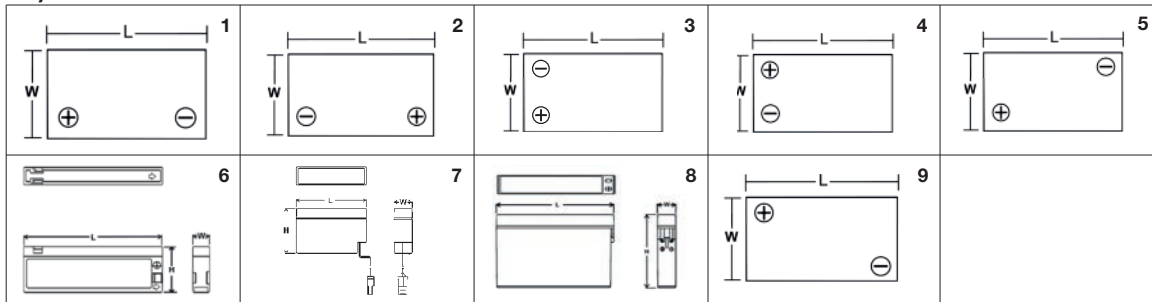
**NOTE:** All dimensions +/- 1mm; Weights are +/- 5%

#### Torque Specifications:

M5 receptacle: 35.4 lbf.in (4Nm) +/- 5%

M6 receptacle: 65 lbf.in (6.8Nm) +/- 5%

### Layout Illustration



### Terminal Illustration

<p><b>Faston Tab: 187 A</b></p> <table border="1"> <thead> <tr> <th>INCH</th> <th>MM</th> </tr> </thead> <tbody> <tr><td>0.250</td><td>6.35</td></tr> <tr><td>0.187</td><td>4.75</td></tr> <tr><td>0.124</td><td>3.15</td></tr> <tr><td>0.098</td><td>2.49</td></tr> <tr><td>0.059</td><td>1.50</td></tr> <tr><td>0.031</td><td>0.79</td></tr> <tr><td>0.020</td><td>0.51</td></tr> <tr><td>0.004</td><td>0.10</td></tr> </tbody> </table>	INCH	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	<p><b>Faston Tab: 187 B</b></p> <table border="1"> <thead> <tr> <th>INCH</th> <th>MM</th> </tr> </thead> <tbody> <tr><td>0.472</td><td>11.99</td></tr> <tr><td>0.250</td><td>6.35</td></tr> <tr><td>0.236</td><td>5.99</td></tr> <tr><td>0.187</td><td>4.75</td></tr> <tr><td>0.130</td><td>3.30</td></tr> <tr><td>0.079</td><td>2.01</td></tr> <tr><td>0.020</td><td>0.51</td></tr> </tbody> </table>	INCH	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	<p><b>Faston Tab: 250 C</b></p> <table border="1"> <thead> <tr> <th>INCH</th> <th>MM</th> </tr> </thead> <tbody> <tr><td>0.250</td><td>6.35</td></tr> <tr><td>0.124</td><td>3.15</td></tr> <tr><td>0.098</td><td>2.49</td></tr> <tr><td>0.059</td><td>1.50</td></tr> <tr><td>0.031</td><td>0.79</td></tr> <tr><td>0.020</td><td>0.51</td></tr> <tr><td>0.004</td><td>0.10</td></tr> </tbody> </table>	INCH	MM	0.250	6.35	0.124	3.15	0.098	2.49	0.059	1.50	0.031	0.79	0.020	0.51	0.004	0.10
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### Charging

- Refresh charge: Product in storage (ambient temperature 25°C) 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 0.1C for 15 to 20 hours.

### Discharge

- Stop operation when voltage has reached the minimum permissible voltage (1.6Vpc). Recharge immediately.
- Do not operate at 3C 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 recharge 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.

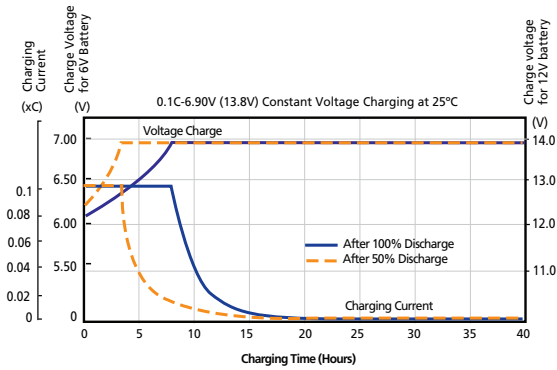
### Incorporating battery into equipment

- 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.
- It is not recommended to install/operate the battery in the inverted position.

### Others

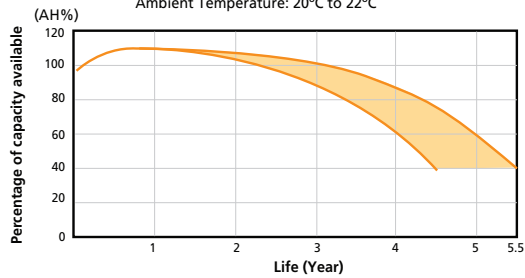
- Avoid terminal short circuit.
- DO NOT expose to open flame.
- **WARNING** - Avoid exposure of the battery to any type of oil, solvent, detergent, petroleum-based solvent or ammonia solution. These materials could potentially cause permanent damage to the battery box and lid and will void the warranty.

### Charging Characteristics



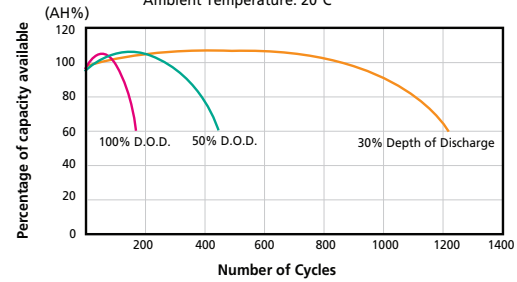
### Float service life NP series

Testing conditions: Floating Voltage: 2.25 to 2.30V/Cell  
Ambient Temperature: 20°C to 22°C

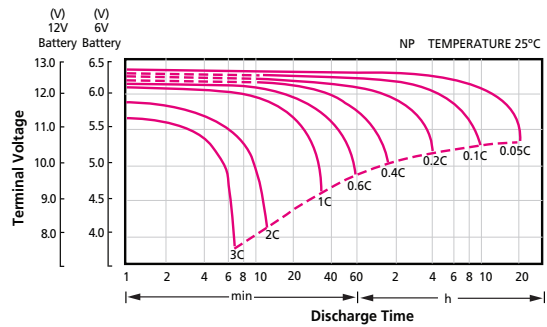


### Cycle service life in relation to depth of discharge NP series

Testing conditions: Discharge Current: 0.17C Amp.  
Charging Current: 0.09C Amp.  
Charging Volume: 125% of Discharged Capacity  
Ambient Temperature: 20°C



### Discharge characteristics curves at 25°C NP series



If discharge currents in excess of 3C are required, consult the EnerSys Technical Department prior to use.

### Charging Voltage

Temperature °C	Standby use* Float voltage range per cell	Cyclic use** Volts per cell
0	2.340	2.510
10	2.310	2.480
20	2.280	2.450
25	2.265	2.435
30	2.250	2.420
35	2.235	2.405
40	2.220	2.390

\* Minimum current 5% C<sub>20</sub> no max current limit  
\*\* Max current limit 25% C<sub>20</sub>



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