

genesis[®]
NP

data safe[®]
NPX



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

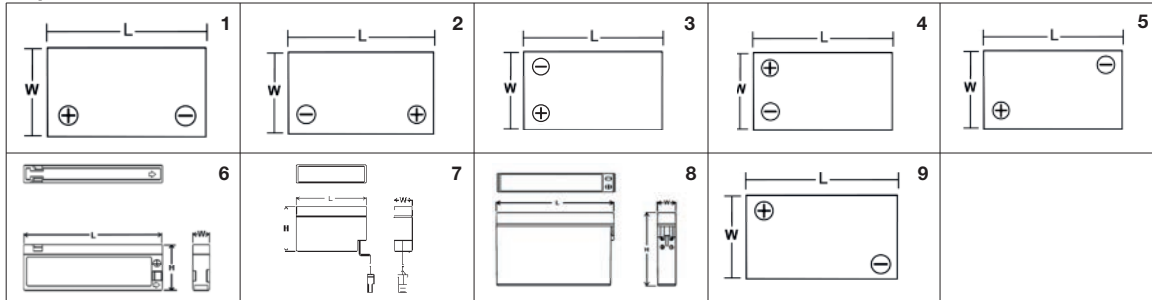
NOTE: All dimensions +/- 1mm; Weights are +/- 5%

Torque Specifications:

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

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

Layout Illustration



Terminal Illustration

Faston Tab: 187 A	INCH = MM <table><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></table>	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	Faston Tab: 187 B	INCH = MM <table><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></table>	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	Faston Tab: 250 C	INCH = MM <table><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></table>	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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M5 Threaded Receptacle E	M6 Threaded Receptacle G	JST No. VHR-2N F H	INCH = MM <table><tr><td>0.530</td><td>13.46</td></tr><tr><td>0.420</td><td>10.67</td></tr><tr><td>0.310</td><td>7.87</td></tr><tr><td>0.230</td><td>5.84</td></tr><tr><td>0.160</td><td>4.06</td></tr></table>	0.530	13.46	0.420	10.67	0.310	7.87	0.230	5.84	0.160	4.06																																				
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Tyco. 1-480318-0 I	Camcorder Terminal D	Note: Dimensions are in millimeters (mm) Tolerances are: ± 0.5 mm for dimensions < 5mm ± 1.0 mm for dimensions ≥ 5mm																																															

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.

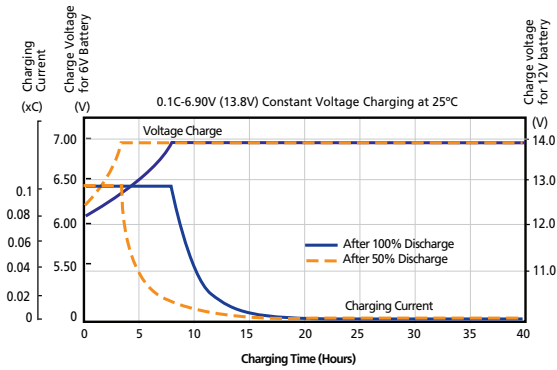
Incorporating battery into equipment

- 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

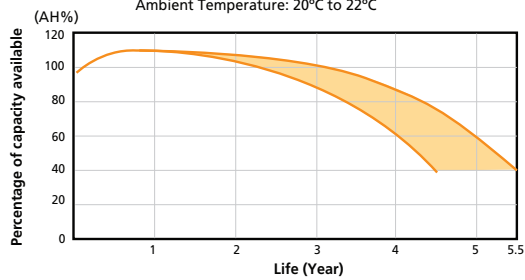
- Avoid terminal short circuit.
- DO NOT expose to open flame.
- **WARNING** - Avoid exposure of the battery to any type of oil, solvent, detergent, petroleum-based solvent or ammonia solution. These materials could potentially cause permanent damage to the battery box and lid and will void the warranty.

Charging Characteristics



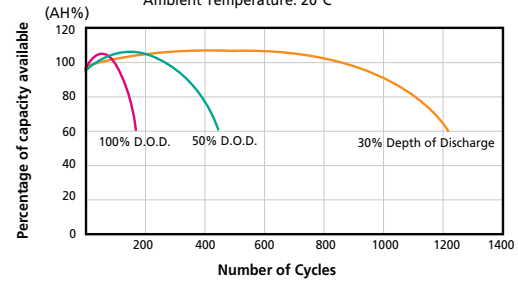
Float service life NP series

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

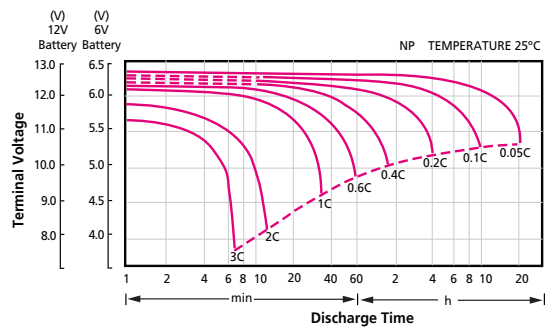


Cycle service life in relation to depth of discharge NP series

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_{20} no max current limit

** Max current limit 25% C_{20}



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