genesis NP

RANGE SUMMARY

EnerSys™
Power/Full Solutions™

Publication No.: EN-NP-RS-002 - February 2005

GENERAL SPECIFICATIONS

GENESIS NP SERIES

Type	FR Type*	Volts	Nominal Capacity (20 hr rate - Ah)	Length		Width		Overall Height Incl. Terminals		Approx Weight		Layout	Terminals
				mm.	(in.)	mm	(in.)	mm.	(in.)	kgs.	(lbs.)		
NP1.2-6	NP1.2-6FR	6	1.2	97.0	3.82	24.0	0.95	54.5	2.14	0.30	0.66	1	A
NP2.8-6	NP2.8-6FR		2.8	66.0	2.60	33.0	1.30	104.0	4.09	0.59	1.30	2	A
NP3-6	NP3-6FR		3.4	134.0	5.28	34.0	1.34	64.0	2.52	0.69	1.52	1	A
NP4-6	NP4-6FR		4.0	70.0	2.76	47.0	1.85	106.0	4.17	0.80	1.76	5	A/C
NP4.5-6	NP4.5-6FR		4.5	70.0	2.76	47.0	1.85	106.0	4.17	0.85	1.87	5	A/C
NP7-6	NP7-6FR		7.0	151.0	5.95	34.0	1.34	97.5	3.84	1.34	2.95	1	A/C
NP8.5-6	NP8.5-6FR		8.5	98.5	3.88	56.2	2.21	117.7	4.63	1.60	3.53	6	A/C
NP10-6	NP10-6FR		10.0	151.0	5.95	50.0	1.97	97.5	3.84	2.05	4.52	1	A/C
NP12-6	NP12-6FR		12.0	151.0	5.95	50.0	1.97	97.5	3.84	2.15	4.74	1	C
NP0.8-12	NP0.8-12FR**	12	0.8	96.0	3.78	25.0	0.98	62.4	2.46	0.37	0.82	7	G/H
NP1.2-12	NP1.2-12FR		1.2	97.0	3.82	47.0	1.85	55.5	2.18	0.56	1.23	3	A
NP2-12	NP2-12FR		2.0	150.0	5.91	20.0	0.79	89.5	3.52	0.68	1.50	8	B
NP2-12C	NP2-12CFR		2.0	182.0	7.17	23.7	0.93	61.3	2.41	0.78	1.76	9	D
NP2.3-12	NP2.3-12FR		2.3	178.0	7.01	35.0	1.38	64.0	2.52	0.96	2.12	1	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
NP3-12	NP3-12FR		3.0	132.0	5.20	33.0	1.30	104.5	4.11	1.20	2.65	1	A
NP3.4-12	NP3.4-12FR		3.4	134.0	5.28	67.0	2.64	64.0	2.52	1.37	3.02	3	A
NP4-12	NP4-12FR		4.0	90.0	3.54	70.0	2.76	107.0	4.21	1.60	3.53	1	A/C
NP5-12	NP5-12FR		5.0	89.6	3.53	69.6	2.74	107.0	4.21	1.76	3.83	1	A/C
NP7-12	NP7-12FR		7.0	151.0	5.95	65.0	2.56	97.5	3.84	2.59	5.71	4	A/C
NP12-12	NP12-12FR		12.0	151.0	5.95	98.0	3.86	97.5	3.84	4.06	8.95	4	C
NP18-12	NP18-12FR		17.2	181.0	7.13	76.2	3.00	167.0	6.58	6.06	13.36	2	F
NP24-12	NP24-12FR		25.0	166.0	6.54	175.0	6.89	125.0	4.92	8.80	19.40	2	F
NP33-12	NP33-12FR		33.0	195.5	7.70	130.0	5.12	179.0	7.05	12.30	27.12	1	E/F
NP38-12	NP38-12FR		40.0	197.0	7.76	165.0	6.50	170.0	6.99	15.03	33.14	2	F
NP55-12	NP55-12FR		55.0	229.0	9.02	138.0	5.43	228.0	8.98	18.20	40.12	1	I
NP65-12	NP65-12FR		65.0	349.8	13.78	166.0	6.54	174.0	6.85	22.00	48.50	2	I
NP75-12	NP75-12FR		75.0	259.0	10.20	168.0	6.61	227.0	8.94	26.50	58.42	1	I
NP90-12	NP90-12FR		90.0	304.0	11.97	168.0	6.50	229.0	9.02	30.50	67.24	1	I
NP100-12	NP100-12FR		100.0	329.0	12.95	172.0	6.77	221.0	8.70	34.10	75.18	1	I
NP120-12	NP120-12FR		120.0	407.0	16.02	173.0	6.81	234.5	9.23	41.3	91.05	1	I
NP150-12	NP150-12FR		150.0	483.0	19.02	170.0	6.69	241.0	9.49	46.8	103.17	1	I
NP200-12	NP200-12FR		200.0	520.0	20.47	260.0	10.24	240.0	9.45	73.00	160.93	3	I

FOOTNOTES

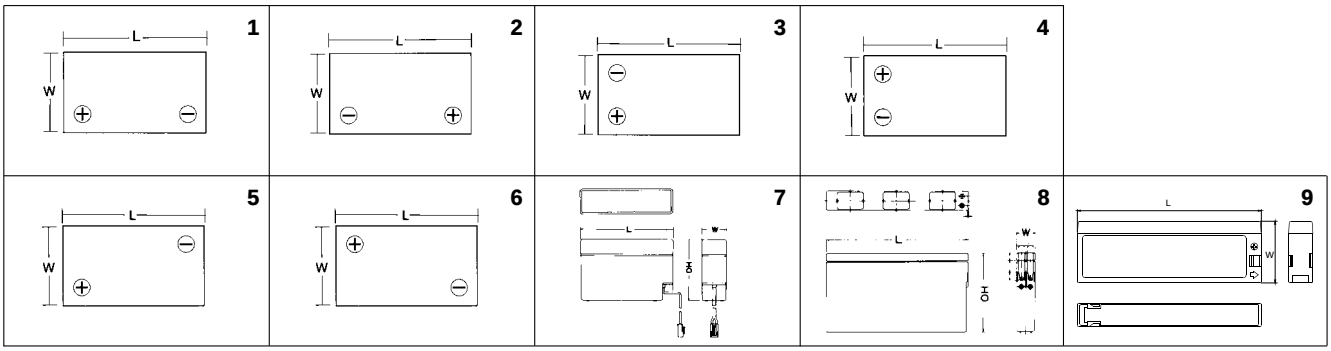
UL listing pending - File No. MH16464

* FR: UL94-V0, Flame Retardant Container and Lid (Oxygen index: 30)

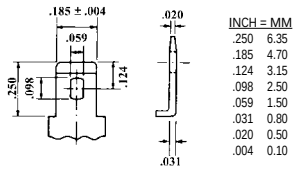
** FR: UL94-V2, Flame Retardant Container and Lid (Oxygen index: 30)

Dimension tolerance ± 1mm (0.04 in)

• LAYOUT



• TERMINAL



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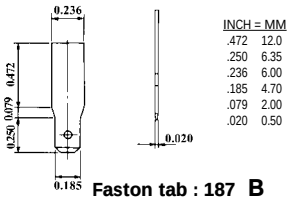

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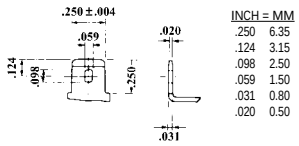

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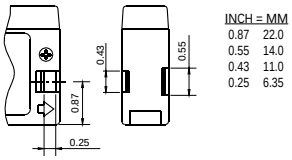
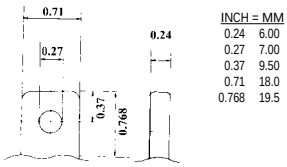
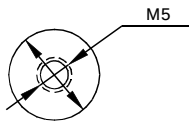


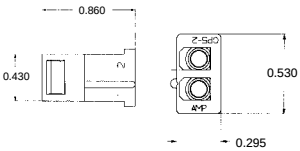
Camcorder Type D



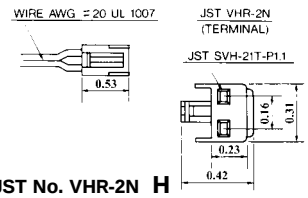
Bolt fastened terminal E



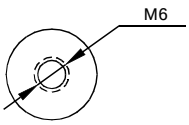
Receptacle F



Tyco. 1-480318-0 G



JST No. VHR-2N H



Receptacle I

Charging

- Standby use: Apply constant voltage charging at 2.275Vpc (or 2.25–2.30Vpc).
- Cyclic use: Apply constant voltage charging at 2.40-2.45Vpc. Initial charging current should be set at less than 0.25CA.
- Top charge: Product in storage (ambient temperature 25°C/77°F) requires a top charge every six months. Apply constant voltage at 2.40Vpc, 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 -15ºC to 50ºC for both charging and discharging.

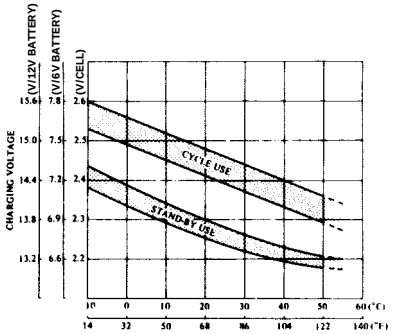
Incorporating battery into equipment

- 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.

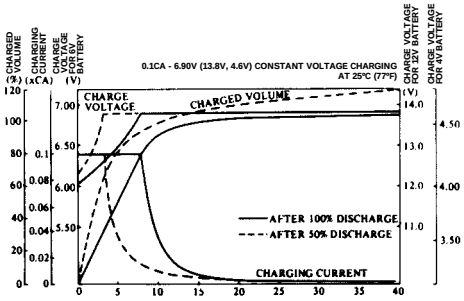
Others

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

RELATIONSHIP BETWEEN CHARGING VOLTAGE AND TEMPERATURE

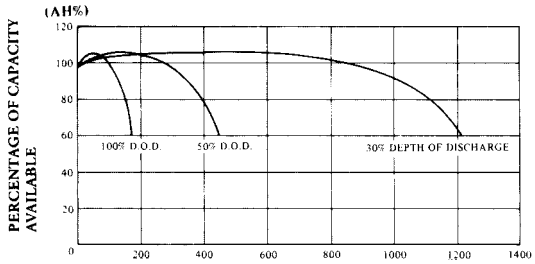


CHARGING CHARACTERISTICS



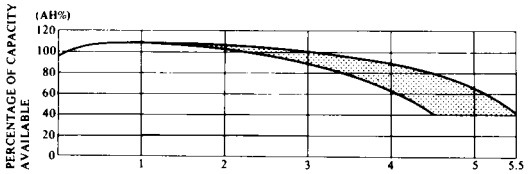
CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE NP SERIES

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: 20°C (68°F TO 77°F)



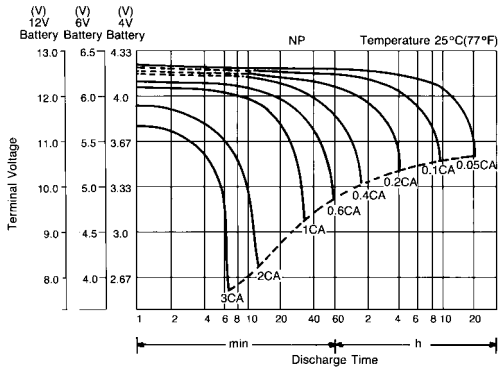
FLOAT SERVICE LIFE NP SERIES

TESTING CONDITIONS: FLOATING VOLTAGE: 2.25 TO 2.30V/CELL
AMBIENT TEMPERATURE: 20°C TO 22°C (68°F TO 72°F)



DISCHARGE CHARACTERISTICS CURVES AT 25°C (77°F)

NP SERIES



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

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