NP/NPX SERIES

SEALED RECHARGEABLE LEAD-ACID BATTERIES

NP/NPX INDUSTRIAL BATTERIES

Yuasa brand NP and NPX batteries give excellent performance in either float or cyclic applications. These batteries are designed for light duty cyclic applications, fire and security systems, Emergency lighting, solar and wind support systems, UPS systems and toys!

TYPE	FR TYPE	VOLTS	NORMAL CAPACITY	LENGTH		WIDTH		OVERALL HEIGHT Incl. TERMINALS		WEIGHT		LAYOUT	TERMI-NALS
			10 hr rate (Ah)	mm.	(in.)	mm.	(in.)	mm.	(in.)	kgs.	(lbs.)		
NP SERIES			20 hr Rate (Ah)										
NP1.2-6	–	6	1.2	97	3.82	25	0.98	54.5	2.15	0.3	0.66	1	A
NP3-6	–		3	134	5.28	34	1.33	64	2.52	0.65	1.43	1	A
NP4-6	–		4	70	2.76	47	1.85	105.5	4.15	0.85	1.87	5	A
NP7-6	–		7	151	5.95	34	1.33	97.5	3.84	1.35	2.98	1	A
NP10-6	–		10	151	5.95	50	1.97	97.5	3.84	2.0	4.41	1	A
NP1.2-12	–	12	1.2	97	3.82	48	1.89	54.5	2.15	0.57	1.25	3	A
–	NP2.3-12FR		2.3	178	7.01	34	1.34	64	2.52	0.94	2.07	1	A
NP4-12	–		4	90	3.54	70	2.76	106	4.17	1.7	3.74	1	A
NP5-12	–		5	90	3.54	70	2.76	105	4.13	1.85	4.07	1	B/D
NP7-12	NP7-12FR		7	151	5.94	65	2.56	97.5	3.84	2.5	5.51	4	A/D
NP7.5-12	–		7.5	151	5.94	65	2.56	97.5	3.84	2.65	5.84	4	A/D
NP12-12	NP12-12FR		12	151	5.94	98	3.86	97.5	3.84	4.0	8.82	4	D
NP18-12B	NP18-12BFR		17.2	181	7.13	76.2	2.99	167	6.57	6.2	13.64	2	E
NP24-12	NP24-12FR		24	166	6.54	175	6.89	125	4.92	8.65	19.05	2	C
NP24-12B	NP24-12BFR		24	166	6.54	175	6.89	125	4.92	8.65	19.05	2	E
NP38-12B	NP38-12BFR		38	197	7.74	165	6.5	175	6.89	13.8	30.4	2	F
NP38-12	–		38	197	7.74	165	6.5	170	6.69	14.2	31.3	2	J
–	NP65-12FR		65	350	13.78	166	6.54	174	6.85	22.8	50.2	2	G
NPX SERIES			W/Cell to 1.67 end voltage (15 Min Rate)										
NPX-50	–	6	50W/Cell	151	5.95	50	1.97	97.5	3.84	2.0	4.41	1	A
NPX-25	NPX-25FR	12	23W/Cell	90	3.54	70	2.75	106	4.17	2.0	4.41	1	D
NPX-35	NPX-35FR		35W/Cell	151	5.94	65	2.56	97.5	3.84	2.65	6.17	4	A/D
–	NPX-80BFR		80W/Cell	181	7.13	76.2	2.99	167	6.57	6.6	14.5	2	E
–	NPX-80RFR		80W/Cell	181	7.13	76.2	2.99	167	6.57	6.6	14.5	2	M5
–	NPX-100RFR		95W/Cell	166	6.54	125	4.92	175	6.89	9.3	20.8	2	M5
–	NPX-150RFR		150W/Cell	197	7.76	165	6.5	175	6.89	15.5	34.1	2	M6

Pb

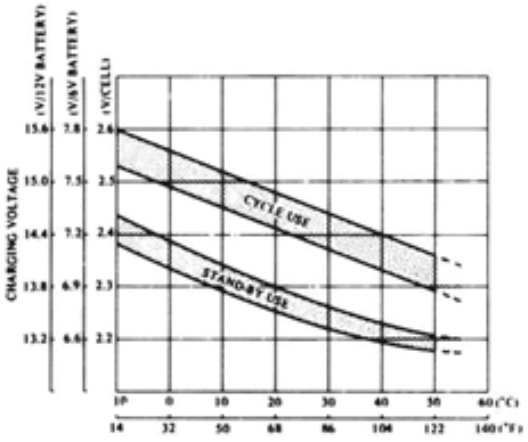
POWERING THE NEXT GENERATION

The Yuasa brand of small valve-regulated batteries have, since their introduction, set the standard for quality and excellence in the field of rechargeable sealed lead-acid battery technology. This standard has been used as a benchmark in applications such as security, uninterruptible power supplies (UPS), emergency lights and medical equipment. Anywhere the need for reliable and dependable back-up power is required, Yuasa sets the pace.

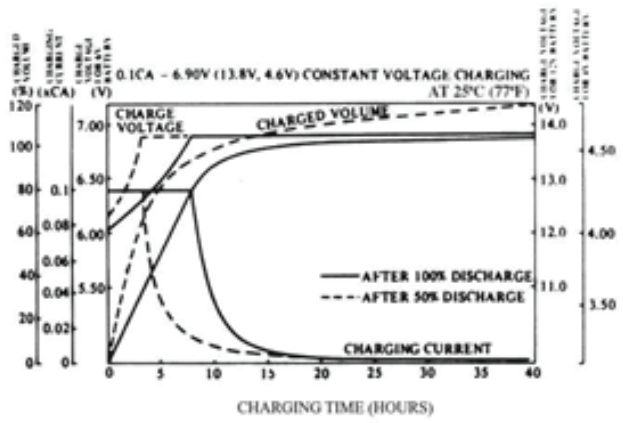
The Yuasa brand NP product line covers the entire spectrum of battery sizes, ranging from 1.2 Ah to 65Ah in 6 and 12 volt varieties. Yuasa also offers a full line of flame retardant batteries (UL94-V0, LOI 30). Designated "FR", these batteries comply with UL1778 flame retardant specifications for UPS.

Yuasa also offers the NPX Series Batteries, designed for high rate discharge applications. These batteries are used primarily where high wattage is required for a short duration. With 50% more wattage available and a 30% reduction in size over conventional batteries, the NPX Series offers a superior value, especially in UPS applications.

RELATIONSHIP BETWEEN CHARGING VOLTAGE AND TEMPERATURE

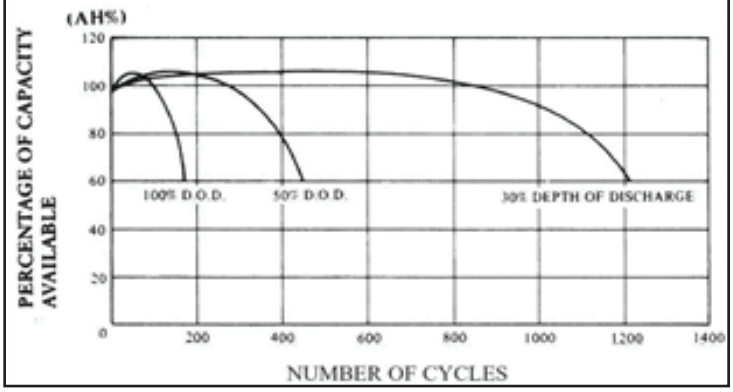


CHARGING CHARACTERISTICS



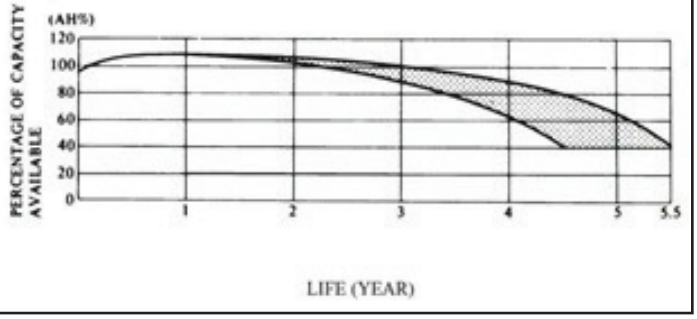
CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE NP SERIES

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)

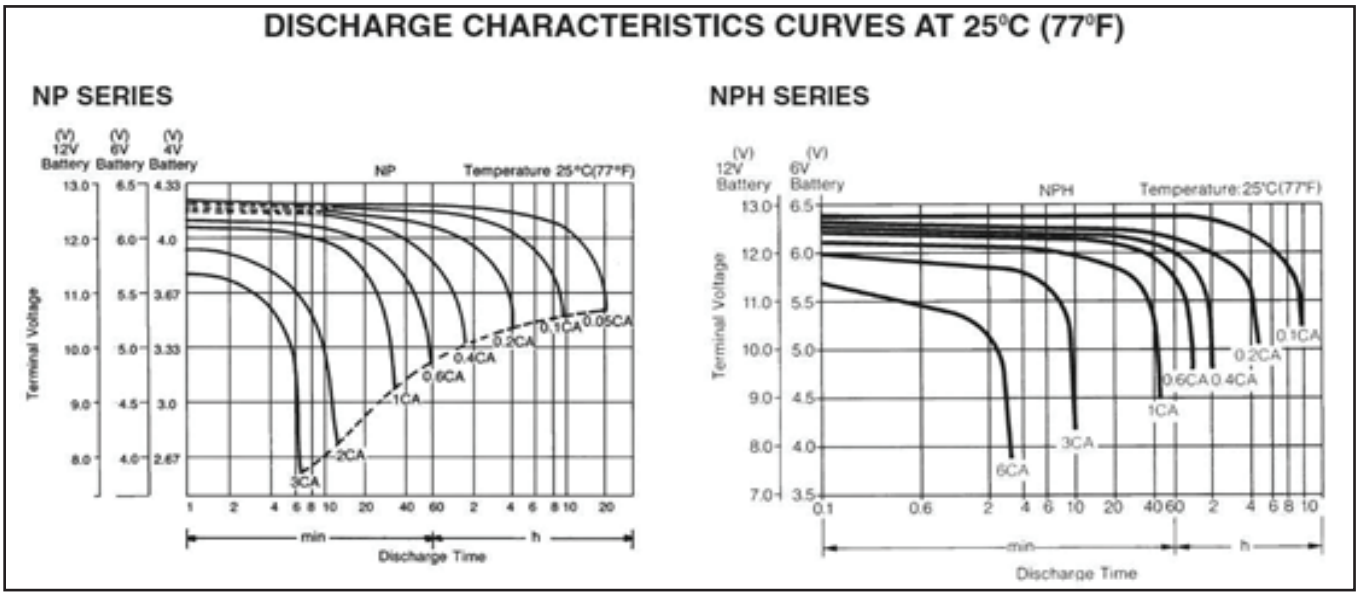


FLOAT SERVICE LIFE NP SERIES

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)



Important notes to prolong battery life:

Charging

- Standby use: Apply constant voltage charging at 2.275 volts per cell (or 2.25–2.30VPC). Cyclic use: Apply constant voltage charging at 2.40–2.50VPC.
- Initial charging current should be set at less than 0.25CA.
- Storage- 6 months- Top charge: Apply constant voltage at 2.40 volts per cell, 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.

Temperature

- Keep within ambient temperatures of –15˚C to +50˚C for both charging and discharging. Store batteries in a dry and cool location.

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

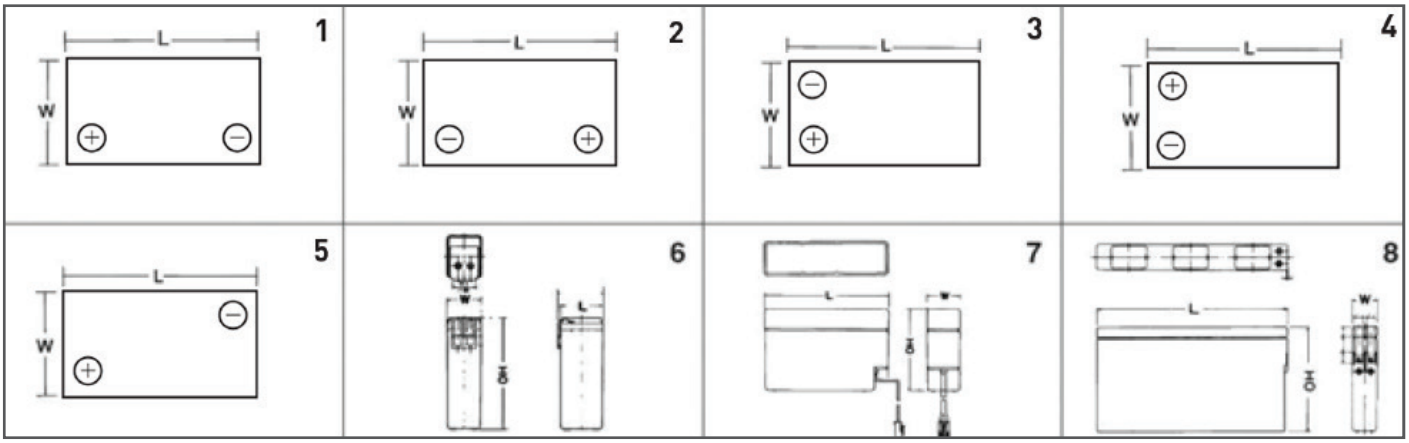
- Avoid terminal short circuit. DO NOT expose to open flame.
- Avoid setting batteries in environments which can cause direct contact to gasoline, paint thinner, organic solvents, synthetic resins, oil, etc…

YUASA

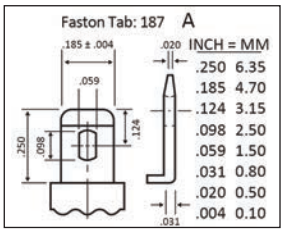
NP/NPX SERIES

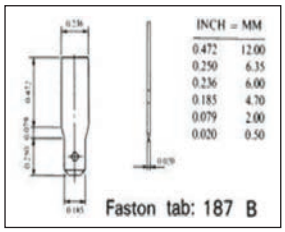
SEALED RECHARGEABLE LEAD-ACID BATTERIES

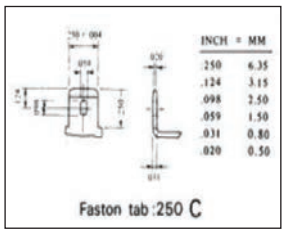
LAYOUT

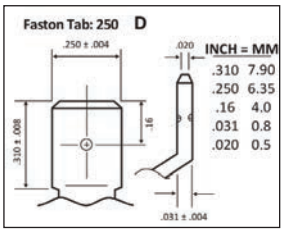


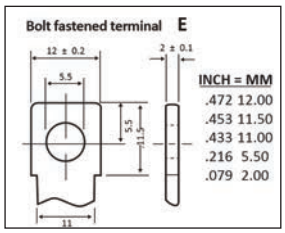
TERMINALS

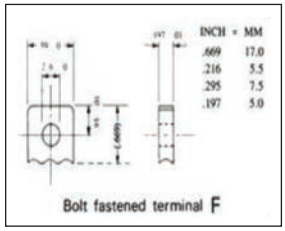


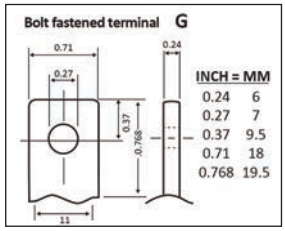


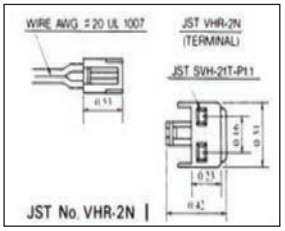


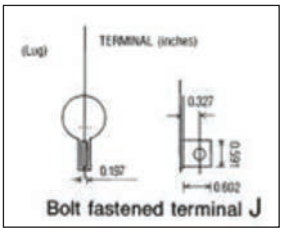


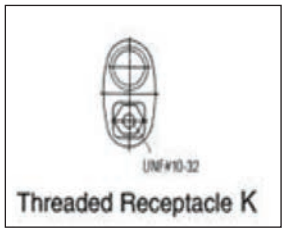


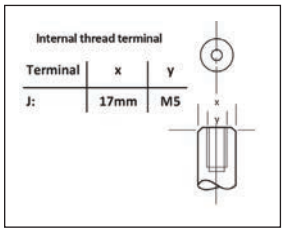


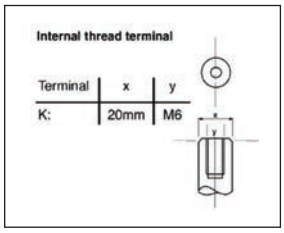












ABOUT GS YUASA ENERGY SOLUTIONS, INC.

GS Yuasa Energy Solutions, Inc. is an American subsidiary of GS Yuasa Corporation, the world's second largest battery company and a 100+ year old Japanese corporation. GS Yuasa Energy Solutions (GYES) was formed in 2019 to address the growing energy storage and reserve power markets. GYES brings together and leverages GS Yuasa Group's advanced technologies with proven American market successes in lithium, telecom, UPS, alarm & security, and energy storage into a single business unit.

GS YUASA

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