

data safe
NPX



RANGE SUMMARY



Sealed Rechargeable Lead Acid Batteries



The **DataSafe** NPX valve regulated lead-acid batteries are 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 **DataSafe** NPX series offers a superior value, especially in UPS applications.

Features

- UL recognized.
- Sealed construction - can be operated in any position without leakage.
- Complies with non-spillable battery regulation.
- Life expectancy at 25°C (77°F):

Standby use:	3-5 years
Standby use NPX-35 only:	8-10 years
Cycle use (approx.):	
100% depth of discharge	250 cycles
50% depth of discharge	550 cycles
30% depth of discharge	1200 cycles
- Charge retention (shelf life) at 68°F (20°C)

1 month	97%
3 months	91%
6 months	85%
- Operating temperature range:

Charge	5°F to 122°F (-15°C to 50°C)
Discharge	-4°F to 140°F (-20°C to 60°C)

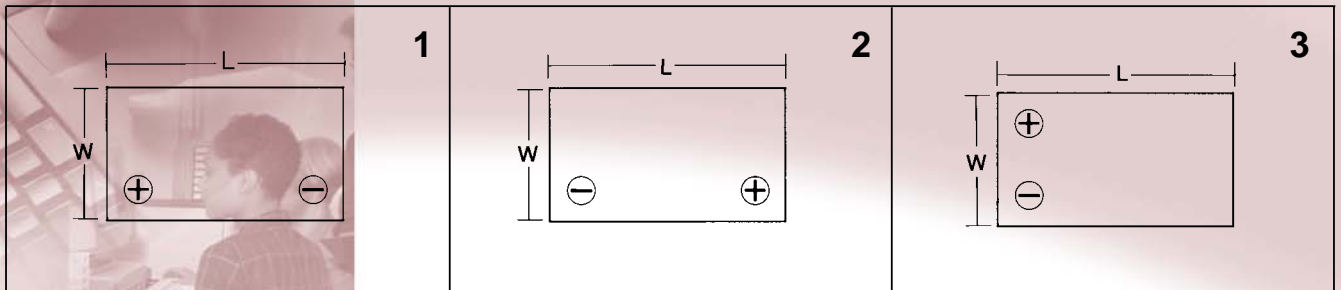
GENERAL SPECIFICATIONS

Type	FR Type*	Volts	W/Cell to 1.67 End Voltage (15 Min Rate)	Length		Width		Overall Height Incl. Terminals		Weight		Layout	Terminals
				mm	in	mm	in	mm	in	kgs	lbs		
NPX-35-6	NPX-35-6FR	6	35W/Cell	151.0	5.95	64.0	1.33	97.5	3.84	1.35	2.98	1	A/B
NPX-50	NPX-50FR		50W/Cell	151.0	5.95	50.0	1.97	97.5	3.84	2.00	4.41	1	A/B
NPX-25	NPX-25FR		23W/Cell	90.0	3.54	70.0	2.75	106.0	4.17	2.00	4.41	1	B
NPX-35	NPX-35FR	12	35W/Cell	151.1	5.94	65.0	2.56	97.5	3.84	2.67	6.24	3	A/B
NPX-80	NPX-80FR		80W/Cell	181.0	7.13	76.2	2.99	167.0	6.57	6.60	14.50	2	C
-	NPX-100B		95W/Cell	166.0	6.54	127.0	4.99	175.0	6.89	9.30	20.80	2	D
-	NPX-100R		95W/Cell	166.0	6.54	127.0	4.99	175.0	6.89	9.30	20.80	2	E
-	NPX-150B		150W/Cell	197.0	7.76	165.0	6.50	175.0	6.89	15.50	34.10	2	D
-	NPX-150R		150W/Cell	197.0	7.76	165.0	6.50	175.0	6.89	15.50	34.10	2	E

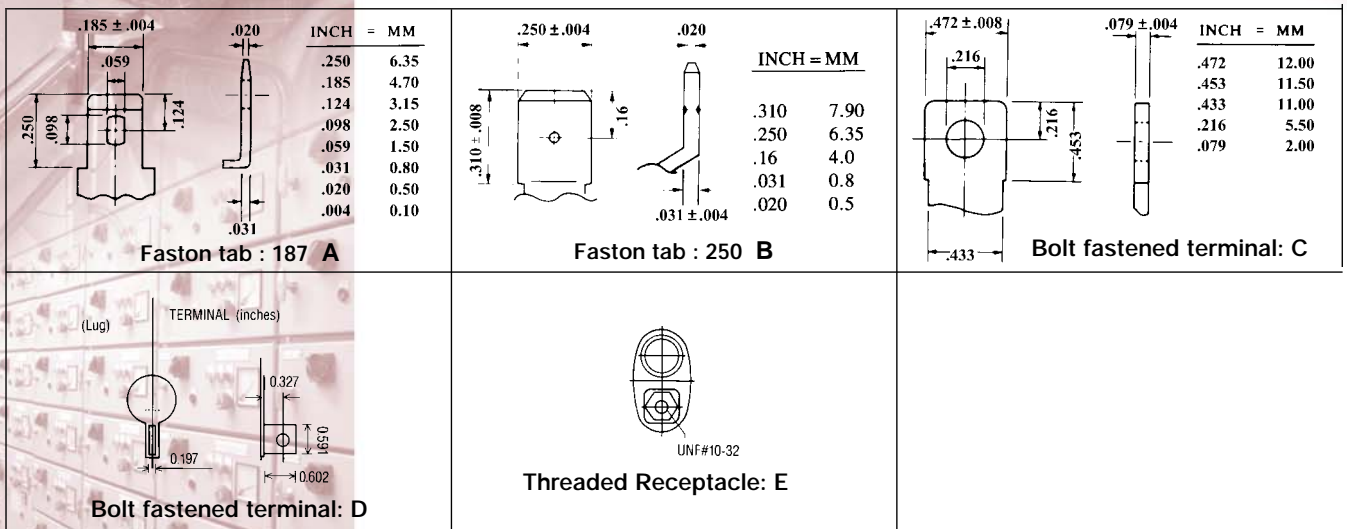
FOOTNOTES:

* FR: UL94-VO, Flame Retardant Case and Cover (Oxygen index: 30) Recognized by UL File No. MH16464

LAYOUT



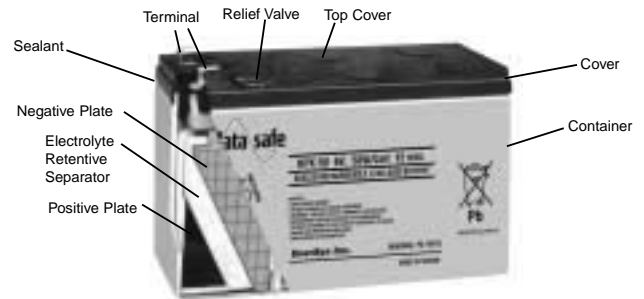
TERMINAL



DataSafe NPX 6 Volt

	NPX-35-6	NPX-50
Nominal Voltage	6	6
Nominal Wattage/Cell		
15 min. discharge rate to 1.67 Vpc	35	50
10 min. discharge rate to 1.67 Vpc	44	60
5 min. discharge rate to 1.67 Vpc	68	94
Nominal Capacity		
10 hr. to 5.25V	8.5Ah @ 0.85A rate	12.0Ah @ 1.2A rate
5 hr. to 5.10V	7.65Ah @ 1.53A rate	10.8Ah @ 2.16A rate
1 hr. to 4.80V	6.38Ah @ 6.38A rate	9.0Ah @ 9.0A rate
Energy Density (10 hr. rate):		
WH/cubic inch	1.68	1.68
WH/cubic liter	103.1	103.1
Specific Energy		
WH/pound	15.7	16.3
WH/kg	34.5	35.8
Internal Resistance of Charged Battery- milliohms (approx)	12	6
Maximum Discharge Current with Standard Terminals - amperes	40	40
Maximum Short-Duration Discharge Current amperes	210	300
Terminal		
Standard Terminal	Quick Disconnect .250"	Quick Disconnect .250"
Optional Terminal	Quick Disconnect .187"	Quick Disconnect .187"
Housing Material		
Standard Housing Material	ABS Resin	ABS Resin
Optional Housing Material	VO Flame Retardant ABS	VO Flame Retardant ABS
Charging Methods (at 20°C)		
Cycle Use - Maximum charging current	2.0A	3.0A
Cycle Use - Charging voltage	7.2 - 7.5V	7.2 - 7.5V
Standby Use - Float charging voltage	6.75 - 6.90V	6.75 - 6.90V

Battery Construction



DataSafe NPX 12 Volt

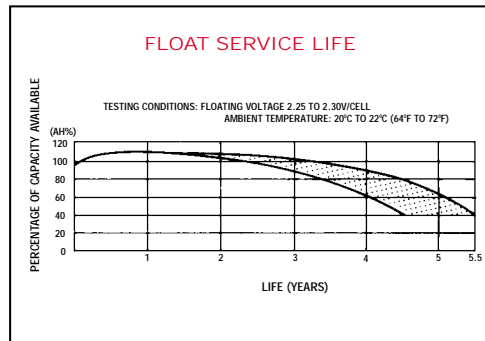
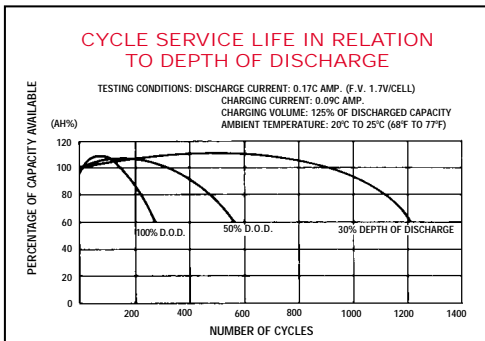
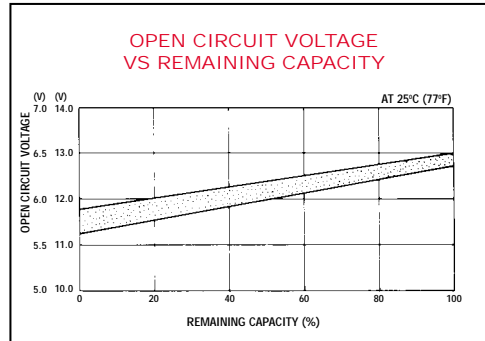
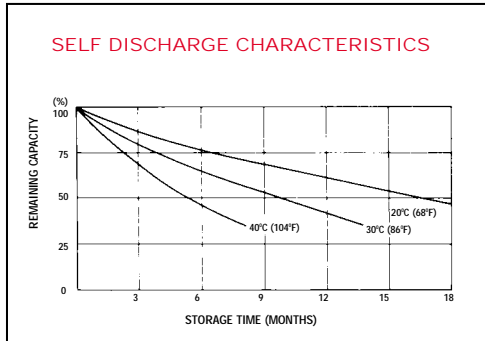
	NPX-25	NPX-35	NPX-80	NPX-100	NPX-150
Nominal Voltage	12	12	12	12	12
Nominal Wattage/Cell					
15 min. discharge rate to 1.67 Vpc	23	35	80	95	150
10 min. discharge rate to 1.67 Vpc	31	44	104	125	190
5 min. discharge rate to 1.67 Vpc	47	68	140	185	275
Nominal Capacity					
10 hr. to 10.5V	5.0Ah @ 0.5A rate	8.5Ah @ 0.85A rate	20Ah @ 2.0A rate	28.0Ah @ 2.8A rate	40.0Ah @ 4.0A rate
5 hr. to 10.2V	4.5Ah @ 0.9A rate	7.65Ah @ 1.53A rate	18.0Ah @ 3.6A rate	25.0Ah @ 5.0A rate	36.0Ah @ 7.2A rate
1 hr. to 9.6V	3.8Ah @ 3.8A rate	6.38Ah @ 6.38A rate	15.0Ah @ 15.0A rate	21.0Ah @ 21.0A rate	30.0Ah @ 30.0A rate
Energy Density (10 hr. rate):					
WH/cubic inch	1.54	1.70	1.71	1.40	1.37
WH/cubic liter	93.0	104.0	104.0	85.9	84.3
Specific Energy					
WH/pound	13.6	15.4	16.6	15.2	14.1
WH/kg	29.9	33.9	36.5	33.5	31.0
Internal Resistance of Charged Battery- milliohms (approx)	18	14	7	10	6.5
Maximum Discharge Current with Standard Terminals - amperes	40	40	150	360	360
Maximum Short-Duration Discharge Current amperes	150	210	450	780	1200
Terminal					
Standard Terminal	Quick Disconnect .250"	Quick Disconnect .250"	Bolt	Receptable	Receptable
Optional Terminal	Quick Disconnect .187"	Quick Disconnect .187"	-	Bolt	Bolt
Housing Material					
Standard Housing Material	ABS Resin	ABS Resin	ABS Resin	VO Flame Retardant ABS	VO Flame Retardant ABS
Optional Housing Material	VO Flame Retardant ABS	VO Flame Retardant ABS	VO Flame Retardant ABS	VO Flame Retardant ABS	VO Flame Retardant ABS
Charging Methods (at 20°C)					
Cycle Use - Maximum charging current	1.25A	2.125A	5.0A	6.5A	10.0A
Cycle Use - Charging voltage	14.4 - 15.0V	14.4 - 15.0V	14.4 - 15.0V	14.4 - 15.0V	14.4 - 15.0V
Standby Use - Float charging voltage	13.50 - 13.80V	13.50 - 13.80V	13.50 - 13.80V	13.50 - 13.80V	13.50 - 13.80V

Constant Wattage - Typical Run Times (watts/cell)

Type	Volts/Cell	Minutes							Hours
		5	10	15	20	30	40	50	1
6 VOLT SERIES									
NPX-35-6	1.75	66.0	42.0	33.0	26.0	20.0	16.2	13.2	11.2
	1.70	67.0	43.0	34.0	27.0	20.8	17.0	13.7	11.5
	1.67	68.0	44.0	35.0	28.0	21.5	17.6	14.0	11.8
	1.60	70.0	46.0	36.0	29.0	22.0	18.2	14.5	12.1
	1.50	71.0	47.0	38.0	31.0	23.0	18.8	15.0	12.4
NPX-50	1.75	92.0	59.0	48.0	36.0	27.0	20.5	17.5	15.2
	1.70	93.0	60.0	49.0	37.0	28.0	21.2	18.0	15.4
	1.67	94.0	60.0	50.0	38.0	29.0	21.7	18.5	15.6
	1.60	96.0	62.0	52.5	40.0	29.5	22.5	18.8	15.8
	1.50	97.0	63.0	53.5	41.0	29.8	23.0	19.0	16.0

12 VOLT SERIES

NPX-25	1.75	43.0	29.0	21.0	17.0	12.8	10.2	8.7	7.6
	1.70	45.0	30.0	22.0	17.6	13.2	10.4	8.9	7.7
	1.67	47.0	31.0	23.0	18.1	13.6	10.6	9.1	7.8
	1.60	48.0	32.0	24.0	18.8	13.8	10.8	9.3	7.9
	1.50	49.0	33.0	25.0	19.4	14.0	11.0	9.5	8.1
NPX-35	1.75	66.0	42.0	33.0	26.0	20.0	16.2	13.2	11.2
	1.70	67.0	43.0	34.0	27.0	20.8	17.0	13.7	11.5
	1.67	68.0	44.0	35.0	28.0	21.5	17.6	14.0	11.8
	1.60	70.0	46.0	36.0	29.0	22.0	18.2	14.5	12.1
	1.50	71.0	47.0	38.0	31.0	23.0	18.8	15.0	12.4
NPX-80	1.75	136.0	102.0	78.0	63.0	42.0	37.0	31.0	25.0
	1.70	138.0	103.0	79.0	64.0	42.5	38.0	31.8	25.4
	1.67	140.0	104.0	80.0	65.0	43.3	38.0	32.3	25.8
	1.60	145.0	106.0	81.0	66.0	44.0	39.0	32.8	26.0
	1.50	148.0	109.0	83.0	68.0	45.0	40.0	33.0	26.2
NPX-100	1.75	170.0	115.0	90.0	74.0	54.0	44.0	35.5	31.5
	1.70	180.0	120.0	92.0	74.5	54.5	44.5	35.8	31.8
	1.67	185.0	125.0	95.0	75.0	55.0	45.0	36.0	32.0
	1.60	190.0	127.0	95.5	75.5	55.5	45.3	36.3	32.3
	1.50	195.0	130.0	96.0	76.0	56.0	45.6	36.6	32.6
NPX-150	1.75	250.0	180.0	140.0	115.0	86.0	71.0	61.0	54.0
	1.70	275.0	190.0	145.0	118.0	88.0	71.5	61.5	54.5
	1.67	285.0	200.0	150.0	120.0	90.0	72.0	62.0	55.0
	1.60	290.0	205.0	155.0	123.0	92.0	72.5	62.5	55.5
	1.50	310.0	210.0	160.0	125.0	92.5	73.0	63.0	56.0



- Avoid terminal short circuit • Do not charge in a sealed container
- When the battery will be used by the current in excess of 3C, consult with EnerSys Inc. prior to use



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