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**RANGE SUMMARY**

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# Sealed Rechargeable, Valve Regulated Lead Acid Batteries



**DataSafe™ NPX** valve regulated lead-acid batteries are designed for high rate discharge applications. These batteries are used primarily where high power is required for a time period. With 50% more wattage available and a 30% reduction in size over conventional batteries, **DataSafe NPX** series offers a superior value, especially in UPS applications.

## Features

- 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
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 20°C (68°F)
 

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

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

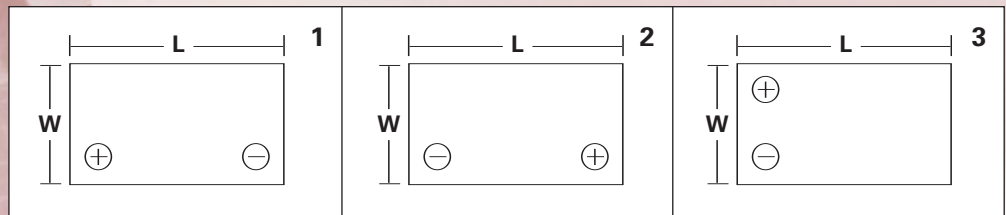
## GENERAL SPECIFICATIONS

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-50	NPX-50FR	6	53W/Cell	151.0	5.95	50.0	1.97	100.0	3.94	2.15	4.74	2	A
NPX-25	NPX-25FR		23W/Cell	90.0	3.54	70.0	2.76	107.0	4.21	1.95	4.30	1	A
NPX-35	NPX-35FR		35W/Cell	151.0	5.95	65.0	2.56	100.0	3.94	2.87	6.33	3	A
NPX-80	NPX-80FR		80W/Cell	181.0	7.13	76.2	3.00	167.0	6.58	6.07	13.38	2	B
NPX-100	NPX-100FR		100W/Cell	165.5	6.62	125.0	4.92	175.0	6.89	8.00	17.64	2	B
NPX-150	NPX-150FR		150W/Cell	197.0	7.76	165.0	6.50	170.0	6.99	15.03	33.14	2	B

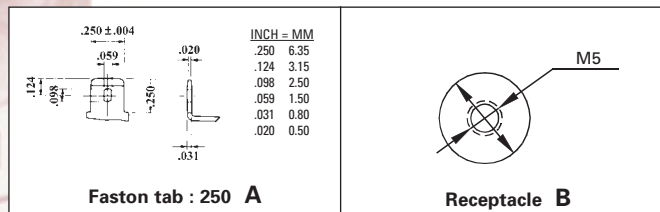
### FOOTNOTES:

\* FR: UL94-VO, Flame Retardant Container and Lid (Oxygen index: 30)  
 UL listing pending - File No. MH16464  
 Dimension tolerance ±1mm (0.04 in)

## • LAYOUT



## • TERMINAL



## DataSafe™ NPX 6 Volt Battery

### NPX-50

<b>Nominal Voltage</b>	6
<b>Nominal Wattage/Cell</b>	
15 min. discharge rate to 1.67 Vpc	53
10 min. discharge rate to 1.67 Vpc	60
5 min. discharge rate to 1.67 Vpc	94
<b>Nominal Capacity</b>	
10 hr. to 5.25V	11.7Ah @ 1.17A rate
5 hr. to 5.10V	10.4Ah @ 2.08A rate
1 hr. to 4.80V	7.8Ah @ 7.8A rate
<b>Energy Density (10 hr. rate):</b>	
WH/cubic inch	1.6
WH/cubic litre	98.2
<b>Specific Energy</b>	
WH/pound	14.8
WH/kg	32.7
<b>Internal Resistance of Charged Battery- milliohms (approx)</b>	10
<b>Maximum Discharge Current with Standard Terminals - amperes</b>	130
<b>Maximum Short-Duration Discharge Current amperes</b>	390
<b>Terminal</b>	
Standard Terminal	Quick Disconnect .250"
<b>Housing Material</b>	
Standard Housing Material	ABS Resin
Optional Housing Material	V0 Flame Retardant ABS
<b>Charging Methods (at 20°C)</b>	
Cycle Use - Maximum charging current	2.9A
Cycle Use - Charging voltage	7.2 - 7.35V
Standby Use - Float charging voltage	6.75 - 6.90V

## Battery Construction



## DataSafe™ NPX 12 Volt Batteries

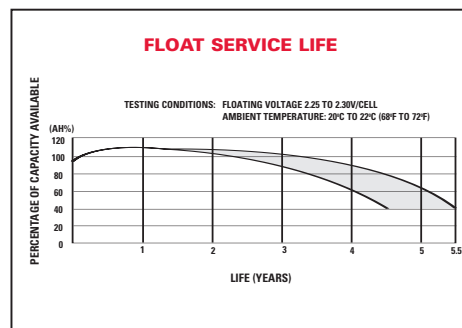
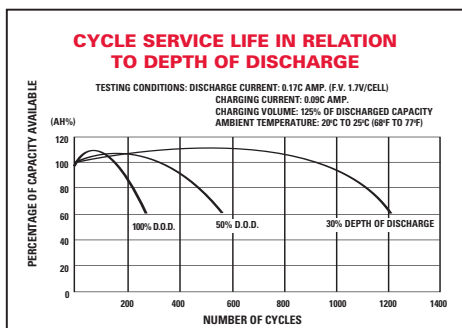
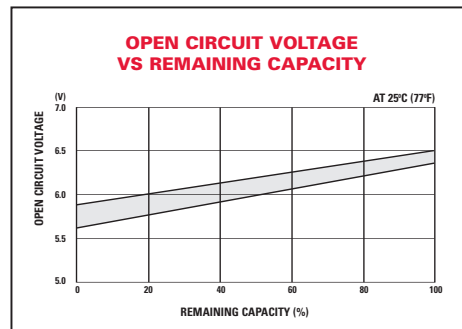
	NPX-25	NPX-35	NPX-80	NPX-100	NPX-150
<b>Nominal Voltage</b>	12	12	12	12	12
<b>Nominal Wattage/Cell</b>					
15 min. discharge rate to 1.67 Vpc	23	35	80	100	150
10 min. discharge rate to 1.67 Vpc	30	44	106	133	199
5 min. discharge rate to 1.67 Vpc	47	68	164	205	307
<b>Nominal Capacity</b>					
10 hr. to 10.5V	4.5Ah @ 0.45A rate	8.5Ah @ 0.85A rate	18Ah @ 1.8A rate	25.2Ah @ 2.52A rate	36.0Ah @ 3.6A rate
5 hr. to 10.2V	4.0Ah @ 0.8A rate	7.65Ah @ 1.53A rate	16.0Ah @ 3.2A rate	22.4Ah @ 4.48A rate	32.0Ah @ 6.4A rate
1 hr. to 9.6V	3.0Ah @ 3.0A rate	6.38Ah @ 6.38A rate	12.0Ah @ 12.0A rate	16.8Ah @ 16.8A rate	24.0Ah @ 24.0A rate
<b>Energy Density (10 hr. rate):</b>					
WH/cubic inch	1.4	1.7	1.5	1.3	1.2
WH/cubic litre	85.2	104	94.2	79.4	75.2
<b>Specific Energy</b>					
WH/pound	12.6	15.4	16.1	13.9	12.8
WH/kg	27.7	33.9	35.6	30.5	28.2
<b>Internal Resistance of Charged Battery- milliohms (approx)</b>	35	14	13	9	8
<b>Maximum Discharge Current with Standard Terminals - amperes</b>	50	40	200	280	320
<b>Maximum Short-Duration Discharge Current amperes</b>	150	210	600	840	800
<b>Terminal</b>					
Standard Terminal	Quick Disconnect .250"	Quick Disconnect .250"	Receptacle	Receptacle	Receptacle
<b>Housing Material</b>					
Standard Housing Material	ABS Resin	ABS Resin	ABS Resin	V0 Flame Retardant ABS	V0 Flame Retardant ABS
Optional Housing Material	V0 Flame Retardant ABS	V0 Flame Retardant ABS	V0 Flame Retardant ABS	ABS Resin	ABS Resin
<b>Charging Methods (at 20°C)</b>					
Cycle Use - Maximum charging current	1.125A	2.125A	4.5A	6.3A	9.0A
Cycle Use - Charging voltage	14.4 - 14.7V	14.4 - 14.7V	14.4 - 14.7V	14.4 - 14.7V	14.4 - 14.7V
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 Power Discharge (Watts per cell) at 25°C (77°F)

Type	Volts/Cell	Minutes							Hours	
		5	10	15	20	30	40	50	1	
6 VOLT SERIES	NPX-50	1.75	99.6	65.8	50.2	40.8	30.1	23.6	20.2	17.3
		1.70	105.5	68.9	52.1	42.3	31.0	24.2	20.7	17.7
		1.67	108.5	70.3	53.0	42.9	31.4	24.5	20.9	17.8
		1.60	113.8	72.3	54.1	43.6	31.8	24.8	21.1	18.0
		1.50	116.6	73.3	55.2	44.5	32.5	25.3	21.6	18.5

## 12 VOLT SERIES

NPX-25	1.75	43.2	28.6	21.8	17.7	13.1	10.2	8.8	7.5
	1.70	45.8	29.9	22.6	18.3	13.5	10.5	9.0	7.7
	1.67	47.1	30.5	23.0	18.6	13.6	10.6	9.1	7.7
	1.60	49.4	31.4	23.5	18.9	13.8	10.8	9.2	7.8
	1.50	50.6	31.8	24.0	19.3	14.1	11.0	9.4	8.0
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	17.5	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	150.3	99.4	75.7	61.7	45.5	35.6	30.5	26.1
	1.70	159.2	103.9	78.7	63.8	46.8	36.6	31.2	26.7
	1.67	163.8	106.1	80.0	64.8	47.4	37.0	31.5	26.9
	1.60	171.8	109.1	81.7	65.9	48.0	37.5	31.9	27.2
	1.50	176.0	110.7	83.3	67.2	49.0	38.2	32.6	27.9
NPX-100	1.75	187.9	124.2	94.6	77.1	56.9	44.6	38.2	32.6
	1.70	199.0	129.9	98.3	79.8	58.5	45.7	39.0	33.3
	1.67	204.7	132.6	100.0	80.9	59.3	46.3	39.4	33.6
	1.60	214.8	136.4	102.1	82.3	60.0	46.8	39.9	34.0
	1.50	220.0	138.3	104.2	84.0	61.2	47.8	40.8	34.9
NPX-150	1.75	281.9	186.4	141.9	115.6	85.3	66.8	57.2	49.0
	1.70	298.6	194.9	147.5	119.7	87.8	68.6	58.5	50.0
	1.67	307.1	198.9	150.0	121.4	88.9	69.4	59.1	50.5
	1.60	322.1	204.6	153.2	123.5	90.0	70.2	59.8	51.0
	1.50	330.0	207.5	156.2	126.0	91.9	71.6	61.2	52.4



- 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® prior to use



www.enersys-emea.com

**EnerSys**  
P.O. Box 14145  
Reading, PA 19612-4145  
USA  
Tel: +1-610-208-1991  
+1-800-538-3627  
Fax: +1-610-372-8613

**EnerSys Europe**  
Zurich, Switzerland

**EnerSys Asia**  
Guangdong, China  
Tel: +86-755-2689 3639

**EnerSys Ltd.**  
Rake Lane,  
Clifton Junction,  
Swinton, Manchester  
M27 8LR, UK  
Tel: +44 (0)161 794 4611  
Fax: +44 (0)161 727 3809

Contact:

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