

NP12-120Ah

Valve-regulated lead-acid battery



GENERAL PURPOSE SERIES

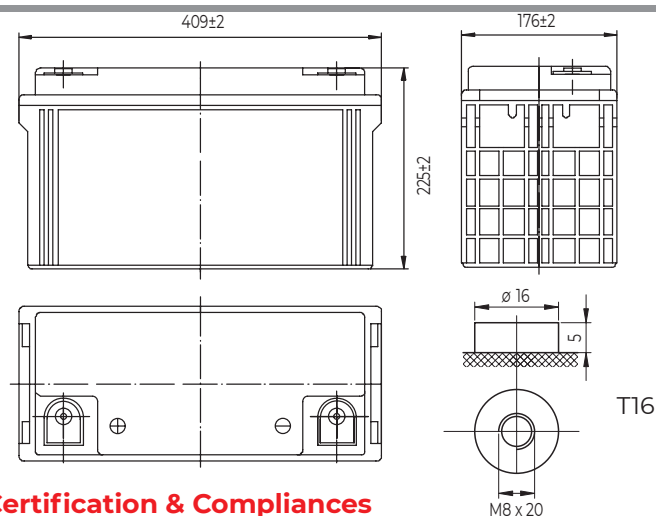
Characteristics

Nominal voltage	12V (6 cells per unit)	
Nominal capacity at 10 hours rate/10.8V (25°C)	120Ah	
Capacity (25°C)	20 Hours rate/10.8V	127Ah
	5 Hours rate/10.8V	102.5Ah
Terminal type	T16	
Torque	12.3±2.5N.m	
Approx. internal resistance (25°C)	4.5mΩ	
Dimensions	Length	407±2mm (16.02inch)
	Width	173±2mm (6.81inch)
	Height	208±2mm (8.19inch)
	Total height (T14)	238±2mm (9.37inch)
Design Life (stand-by)	JIS at 25°C	10 years
	Eurobat at 20°C	10/12 years
Weight	34.80kg (76.70lbs)±3%	
Nominal operating temperature	25°C±3 (77±5°F)	
Operating temperature range	Discharge	-15°C~50°C (5°F~122°F)
	Charge	-10°C~50°C (14°F~122°F)
	Storage	-20°C~50°C (-4°F~122°F)
Float charging voltage at 25°C	13.5V~13.8V	
Cyclic charging voltage at 25°C	14.5V~15.0V	
Temperature compensation	Float charge	-18 mV/°C/Block
	Cycle charge	-30 mV/°C/Block
Max. charging current (A)	36A	
Max. discharge current for 5 seconds	950A	
Self discharge rate (25°C)	≤3%/month	
Battery container ABS UL94-HB	V-0 optional	

Overview

NPP Power General Purpose series batteries are designed with state-of-the-art AGM (absorbent glass mat) technology, high-performance plates and electrolyte. With excellent value and characteristics, this range is suitable for all general purpose applications.

Dimensions & Terminal Type (mm)



Certification & Compliances



Compliant to: EUROBAT, RoHS, WEEE's and Reach.
Manufactured according to IEC 60896-21 / 22

Construction

Component	Positive Plate	Negative plate	Container	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS (V-0 opt.)	AGM	Sulfuric Acid	Rubber	Copper

Constant current discharge characteristics at 25°C

(Ampere/battery)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	262	202	121	74.2	43.8	31.6	25.2	21.5	14.8	12.2	6.47
9.90V	254	197	118	73.0	43.6	31.4	25.1	21.4	14.7	12.2	6.46
10.2V	243	190	115	71.2	43.2	31.2	24.9	21.3	14.6	12.2	6.44
10.5V	233	183	112	69.0	42.6	31.0	24.7	21.1	14.5	12.1	6.40
10.8V	220	173	108	66.7	41.5	30.0	24.0	20.5	14.1	12.0	6.36

Constant power discharge characteristics at 25°C

(Watts/battery)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	2825	2214	1353	845	508	371	297	255	176	146	77.7
9.90V	2741	2160	1326	833	505	369	295	253	175	146	77.5
10.2V	2628	2081	1285	812	500	367	293	251	174	145	77.3
10.5V	2514	2010	1254	786	493	364	291	250	172	144	76.9
10.8V	2373	1904	1208	761	408	353	282	242	167	143	76.3

The above characteristics represent average values and can be obtained within three charge and discharge cycles. The batteries must be fully charged before testing. The data in this document is subject to change without notice and become contractual only after written confirmation. Please contact NPP Power for the latest available version.

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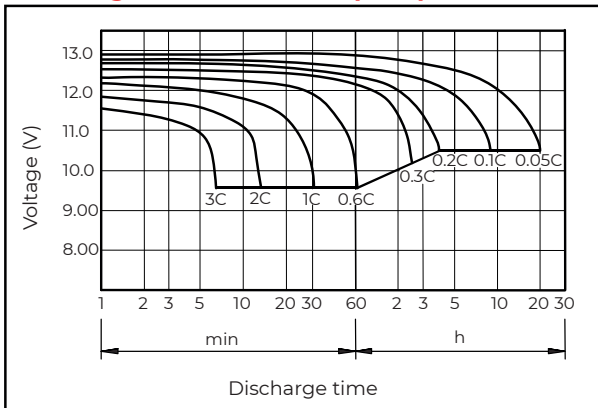
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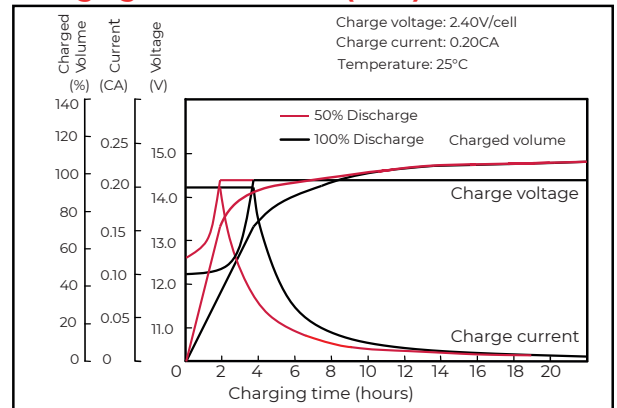
GENERAL PURPOSE

SERIES

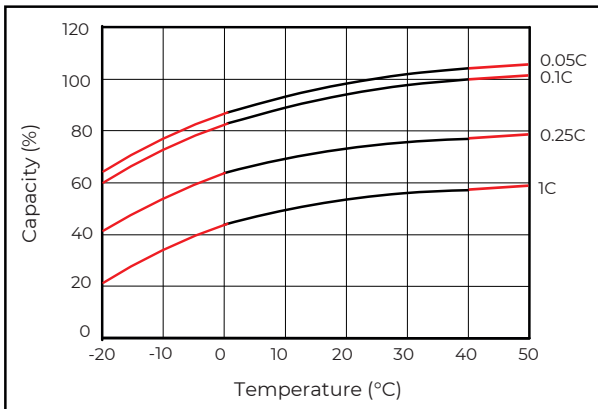
Discharge characteristics (25°C)



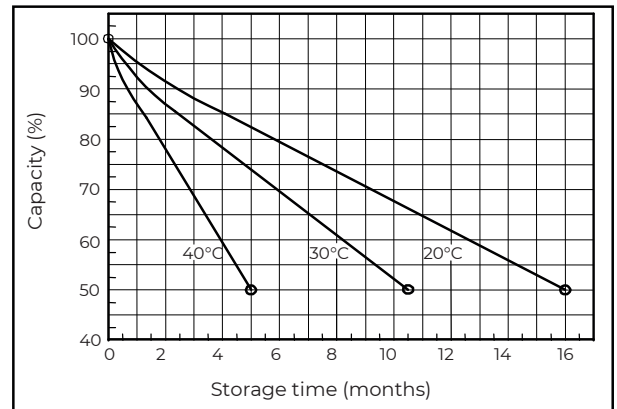
Charging characteristics (25°C)



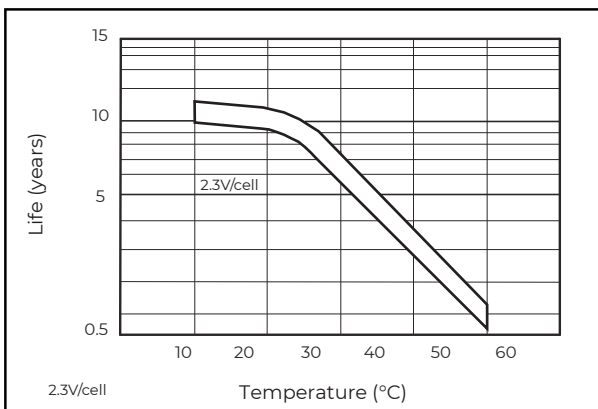
Temperature effects on capacity



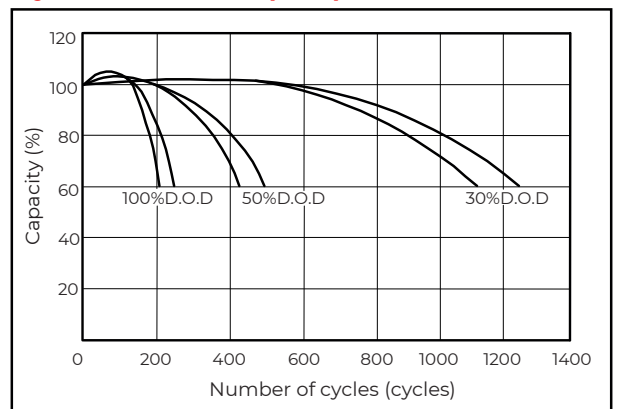
Self-discharge characteristics



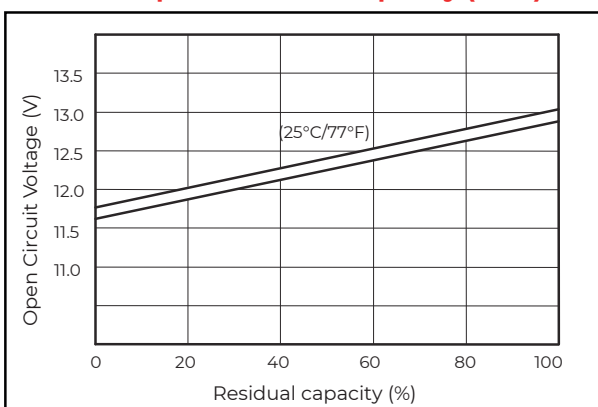
Floating life on temperature



Cycle life on D.O.D (25°C)



Relationship for OCV and capacity (25°C)



Charging voltage VS temperature

