

# NPD12-80Ah

Valve-regulated lead-acid battery



# DEEP CYCLE SERIES

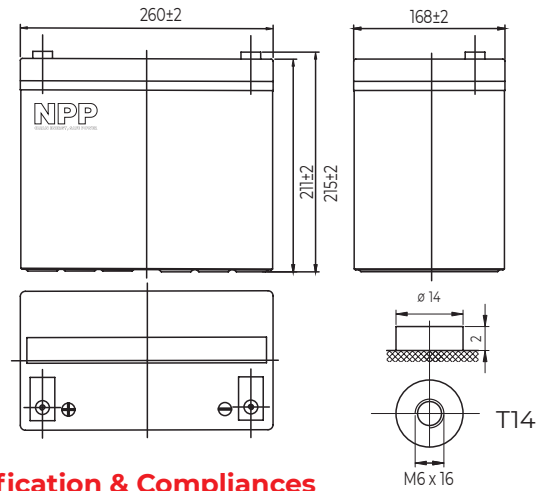
## Characteristics

Nominal voltage	12V (6 cell per unit)	
Nominal capacity at 10 hours rate/10.8V (25°C)	82Ah	
Capacity (25°C)	20 Hours rate/10.8V	87Ah
	5 Hours rate/10.8V	70Ah
Terminal type	T14	
Torque	5.1±0.6 N.m	
Approx. internal resistance (25°C)	5.0 mΩ	
Dimensions	Length	260±2mm (10.24inch)
	Width	168±2mm (6.61inch)
	Height	211±2mm (8.31inch)
	Total height	215±2mm (8.46inch)
Design Life (stand-by)	JIS at 25°C	10 years
	Eurobat at 20°C	10/12 years
Weight	25.30kg (53.30lbs)±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)	24A	
Max. discharge current for 5 seconds	700A	
Self discharge rate (25°C)	≤3%/month	
Battery container ABS UL94-HB	V-0 optional	

## Overview

NPP Power Deep Cycle Series are manufactured specifically to provide outstanding performance in deep cycling applications. The batteries are designed using enhanced alloy contents plates and active paste materials.

## 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	179	138	82.4	50.7	30.0	21.6	17.2	14.7	10.1	8.35	4.42
9.90V	173	134	80.8	49.9	29.8	21.5	17.1	14.6	10.1	8.33	4.42
10.2V	166	129	78.3	48.6	29.5	21.3	17.0	14.5	9.99	8.31	4.40
10.5V	159	125	76.4	47.1	29.1	21.2	16.9	14.4	9.92	8.26	4.38
10.8V	150	118	73.6	45.6	28.3	20.5	16.4	14.0	9.62	8.20	4.35

## 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	1931	1513	925	578	347	254	203	174	120	99.7	53.1
9.90V	1873	1476	906	569	345	252	201	173	120	99.5	53.0
10.2V	1795	1422	878	555	342	251	200	172	119	99.2	52.8
10.5V	1718	1373	857	537	337	249	199	171	118	98.6	52.5
10.8V	1622	1301	826	520	328	241	193	165	114	97.9	52.2

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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