www.npp-power.com.cn

NPP
CLEAN ENERGY, SAFE POWER

Standard | AGM | UPS | Security | IT equipment | Medical Equipment

NP12-55Ah

Valve-regulated lead-acid battery



GENERAL PURPOSE SERIES

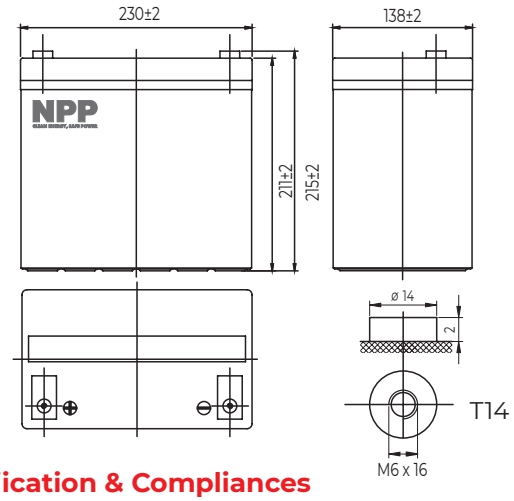
Characteristics

Nominal voltage		12V (6 cells per unit)
Nominal capacity at 10 hours rate/10.8V (25°C)		55Ah
Capacity (25°C)	3 Hours rate/10.8V	41.1Ah
	1 Hour rate/10.5V	30.5Ah
Terminal type		T14
Torque		5.1±0.6N.m
Approx. internal resistance (25°C)		6.5mΩ
Dimensions	Length	230±2mm (9.06inch)
	Width	138±2mm (5.43inch)
	Height	211±2mm (8.31inch)
	Total height (T14)	215±2mm (8.46inch)
Design Life (stand-by)	JIS at 25°C	10 years
	Eurobat at 20°C	10/12 years
Weight		17.30kg (38.10lbs)±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)		16.5A
Max. discharge current for 5 seconds		550A
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	Sefety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	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	120	92.4	55.3	34.0	20.1	14.5	11.6	9.87	6.79	5.60	2.97
9.90V	116	90.2	54.2	33.5	20.0	14.4	11.5	9.82	6.75	5.59	2.96
10.2V	112	86.9	52.5	32.6	19.8	14.3	11.4	9.75	6.70	5.57	2.95
10.5V	107	83.9	51.2	31.6	19.5	14.2	11.3	9.68	6.66	5.54	2.94
10.8V	101	79.5	49.4	30.6	19.0	13.8	11.0	9.39	6.46	5.50	2.92

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	1295	1015	620	387	233	170	136	117	80.6	66.9	35.6
9.90V	1256	990	608	382	231	169	135	116	80.2	66.7	35.5
10.2V	1204	954	589	372	229	168	134	115	79.6	66.5	35.4
10.5V	1152	921	575	360	226	167	133	114	79.1	66.1	35.2
10.8V	1088	873	554	349	220	162	129	111	76.7	65.7	35.0

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.

NPP Power (Vietnam) Co., Ltd.
Lot A22.3, Road C4, Thanh Thanh Cong Industrial Zone,
An Hoa Ward, Trang Bang Town, Tay Ninh Province,
Vietnam

Guangzhou NPP Power Co., Ltd.
No.67 Lianglong Road, Huashan Town, Huadu District,
Guangzhou, China
Email: info@nppower.com.cn Tel. +86 20 37887 390

Copyright © 2022 Guangzhou NPP Power Co., Ltd. All rights reserved.

Rev. 240622CN-KK

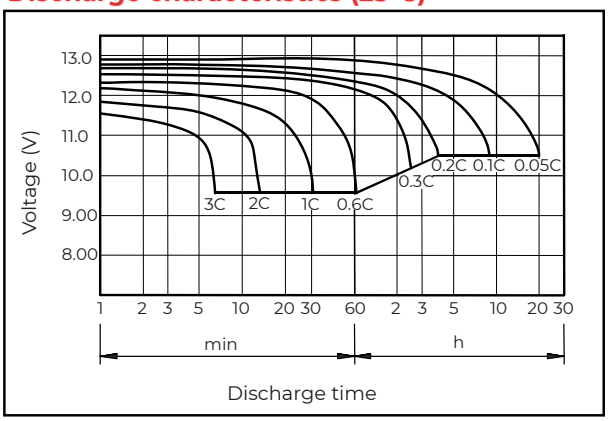
NP12-55Ah

Valve-regulated lead-acid battery

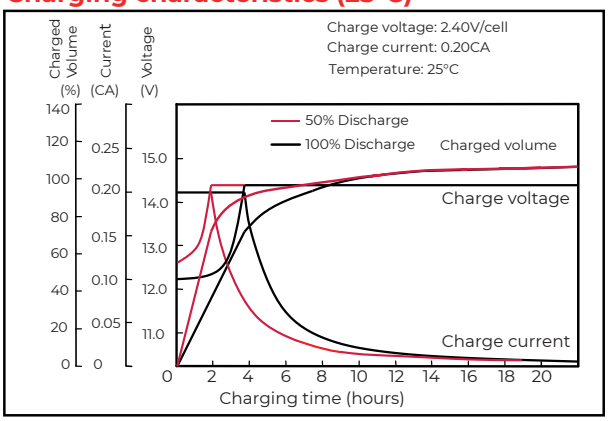
GENERAL PURPOSE

SERIES

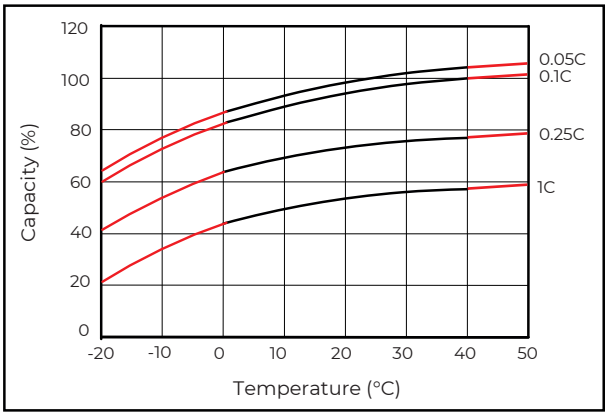
Discharge characteristics (25°C)



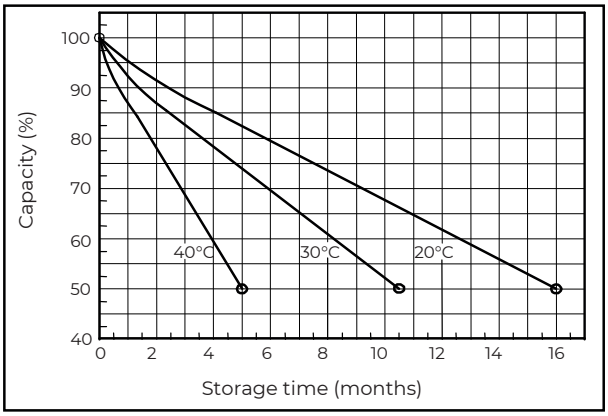
Charging characteristics (25°C)



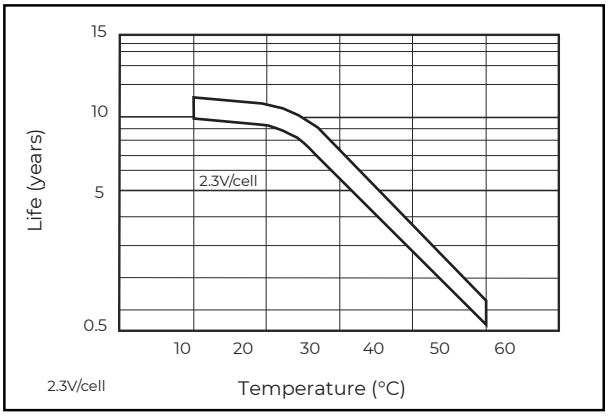
Temperature effects on capacity



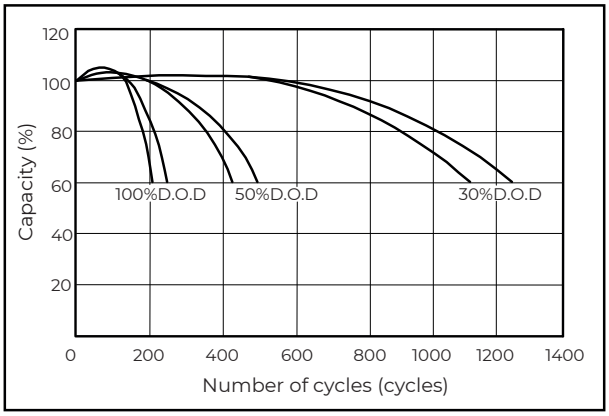
Self-discharge characteristics



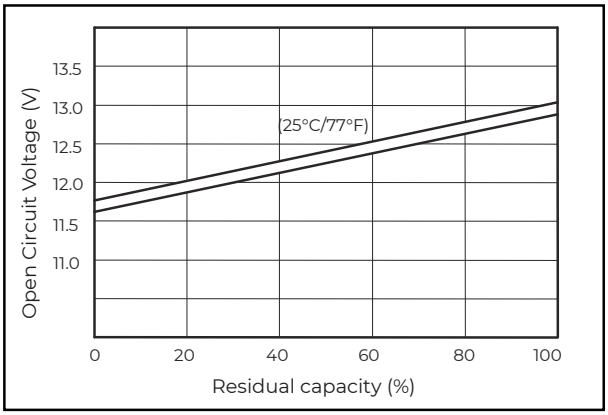
Floating life on temperature



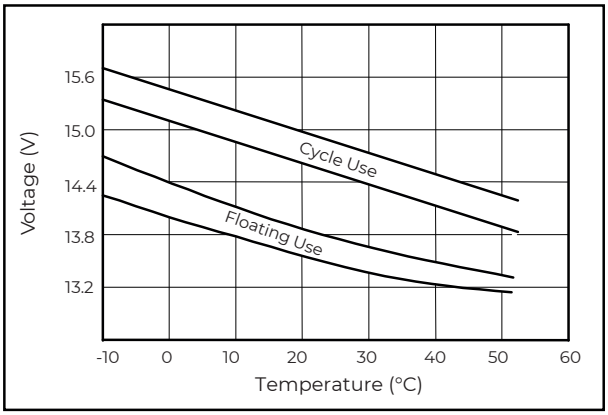
Cycle life on D.O.D (25°C)



Relationship for OCV and capacity (25°C)



Charging voltage VS temperature



Copyright © 2022 Guangzhou NPP Power Co., Ltd. All rights reserved.