

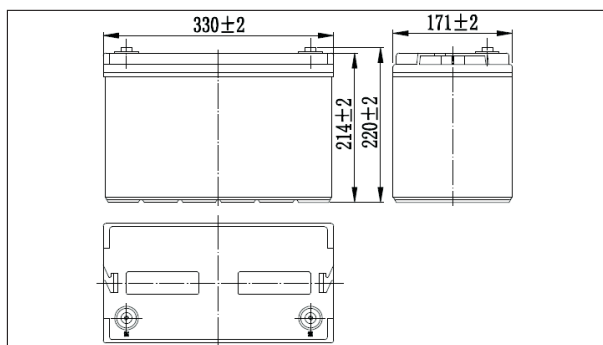
NPG12-110Ah 12V110Ah

Specifications

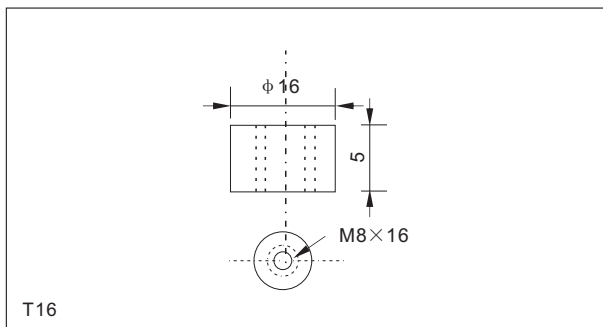
Nominal Voltage	12V	
Rated capacity (20 hour rate)	110Ah	
Dimensions	Length	330±2mm(12.99inch)
	Width	171±2mm(6.73inch)
	Height	214±2mm(8.43inch)
	Total Height	220±2mm(8.66inch)
Approx. Weight	31.0kg(68.2lbs)±3%	



Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25°C)	20HR(10.8V)	110Ah
	3HR(10.8V)	82.5Ah
	1HR(10.5V)	60.5Ah
Terminal type		T16
Internal resistance (Fully charged, 25°C)		Approx. 5m Ω
Capacity affected by temperature (20HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 months	Remaining Capacity:91%
	6 months	Remaining Capacity:82%
	12 months	Remaining Capacity:65%
Nominal operating temperature		25°C ±3°C(77°F ±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(25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.40 to 14.70V Temperature compensation: -30mV/°C
Maximum charging current		20A
Maximum discharge current		800A(5 sec.)
Designed floating life(20°C)		12years

Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Gel	Rubber	Copper

Constant Current Discharge Characteristics Unit:A(25°C,77°F)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	210.6	172.8	104.8	64.8	39.4	28.1	22	18.7	13.2	11	5.8
9.90V	204.1	168.5	102.7	63.8	39.2	28	21.9	18.6	13.2	11	5.8
10.2V	195.5	162	99.6	62.2	38.9	27.8	21.7	18.5	13.1	10.9	5.8
10.5V	187.9	156.6	97.1	60.3	38.3	27.5	21.6	18.4	13	10.9	5.8
10.8V	177.1	149	93.5	58.3	37.4	27	21	17.8	12.5	10.8	5.7

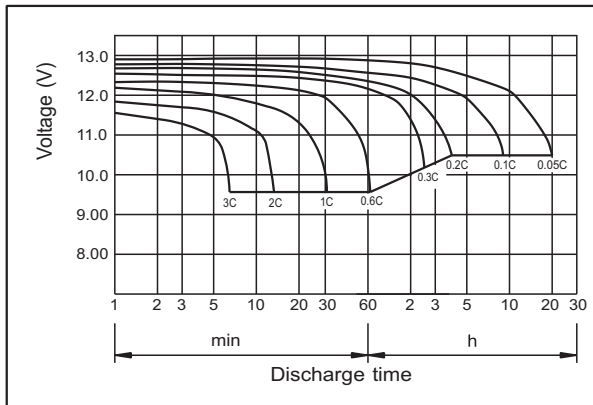
Constant Power Discharge Characteristics Unit:W(25°C,77°F)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	2274.5	1897.6	1175	738.7	456.8	330.5	259.2	221.4	156.6	131.8	69.9
9.90V	2206.4	1852.2	1152.4	727.9	454.7	328.3	257	220.3	156.6	130.7	69.8
10.2V	2115.7	1783.1	1116.7	709.6	450.4	326.2	256	218.2	155.5	130.7	69.6
10.5V	2023.9	1722.6	1089.7	686.9	443.9	324	253.8	217.1	154.4	129.6	69.1
10.8V	1910.5	1631.9	1049.8	665.3	432	317.5	246.2	210.6	149	128.5	68.7

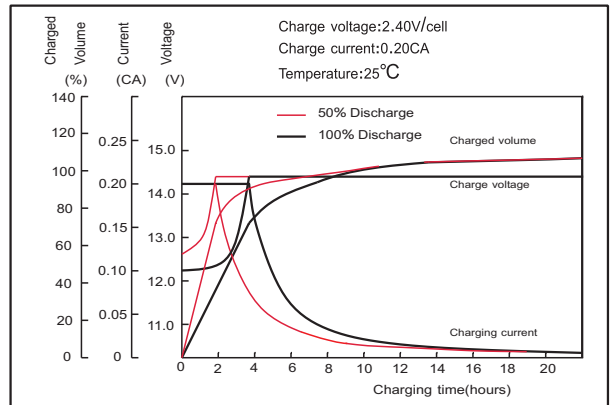
Note: The above characteristics data can be obtained within three charge or discharge cycles.

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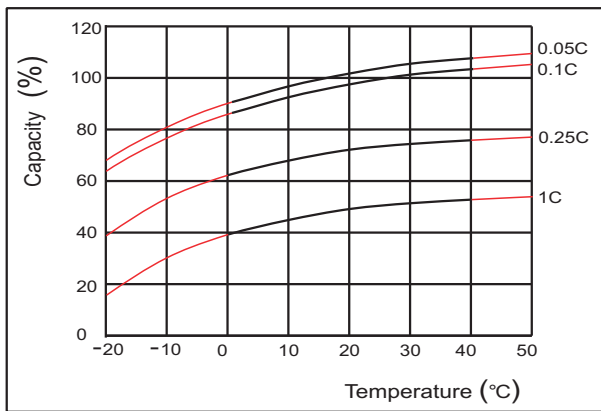
Discharge characteristics(25°C)



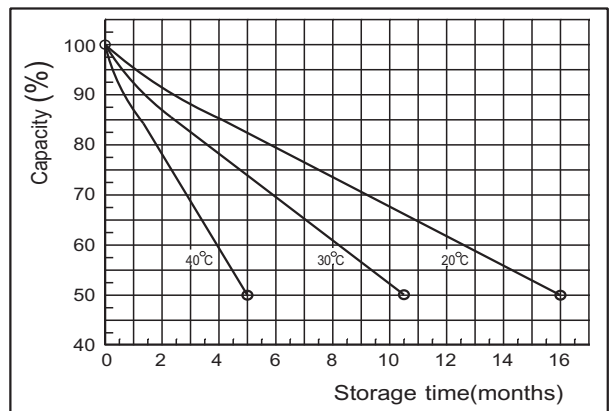
Charging characteristics (25°C)



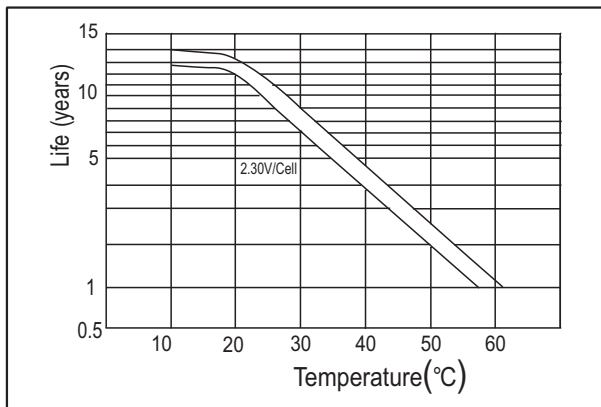
Temperature effects on Capacity



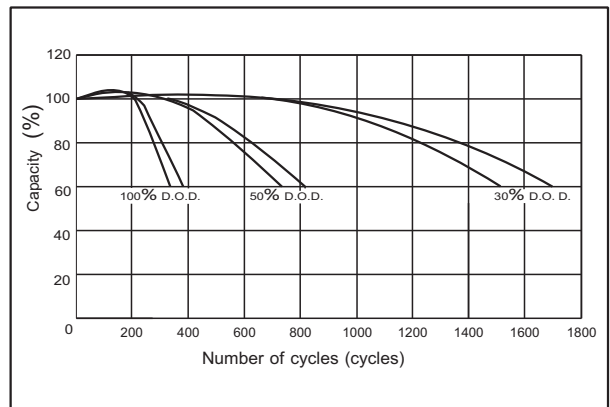
Self-discharge characteristics



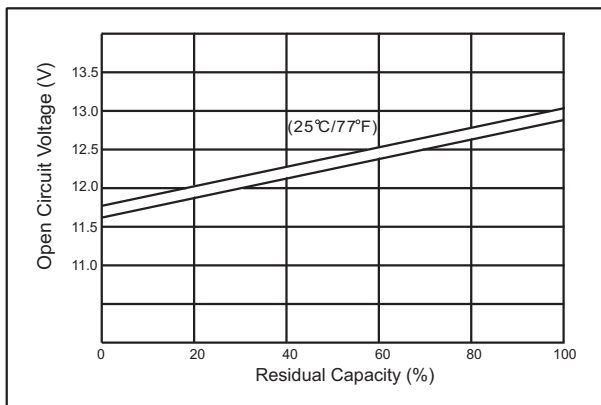
Floating life on Temperature



Cycle life on D.O.D (25°C)



The relationship for OCV and Capacity (25°C)



The relationship for Charging voltage and Temperature

