

NPG2-300Ah 2V300Ah

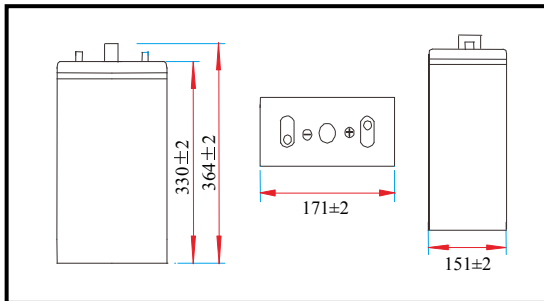
Valve Regulated Lead Acid Battery



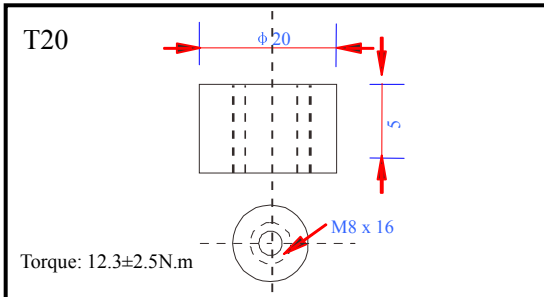
Specifications

Nominal voltage	2V (1 cell per unit)	
Rated capacity (10HR)	300Ah/1.8V	
Dimensions	Length	171±2mm (6.73inch)
	Width	151±2mm (5.94inch)
	Height	330±2mm (12.99inch)
	Total height	364±2mm (14.33inch)
Approx. weight	19.50kg (43.00 lbs)±3%	

Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	10HR (1.80V)	300Ah
	3HR (1.80V)	225Ah
	1HR (1.75V)	165Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.8mΩ
Capacity affected by temperature (10HR)	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)		2.25 to 2.30V Temperature compensation: -3mV/°C/Block
Cyclic charging voltage (25°C)		2.40 to 2.45V Temperature compensation: -5mV/°C/Block
Maximum charging current		60A
Maximum discharge current		2100A (5 sec.)
Design life	18 years for floating (20°C)	
	Eurobat (20°C) >12 years, very long life.	

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: Ampere/Block (at 25°C, 77°F)

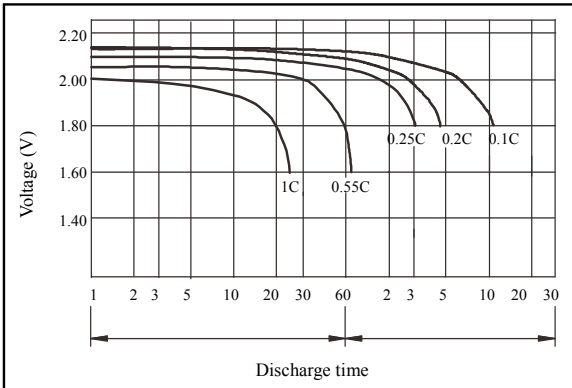
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	375	261	180	108	78.3	61.8	51.4	45.3	36.1	30.5	16.0
1.65V/cell	366	256	176	107	77.9	61.4	51.1	45.0	35.9	30.5	16.0
1.70V/cell	353	248	171	107	77.3	61.0	50.8	44.7	35.6	30.4	16.0
1.75V/cell	341	242	167	105	76.8	60.6	50.4	44.4	35.4	30.2	15.9
1.80V/cell	323	233	162	102	75.3	58.8	48.9	43.1	34.3	30.0	15.8

Constant power discharge characteristics unit: Watt/Block (at 25°C, 77°F)

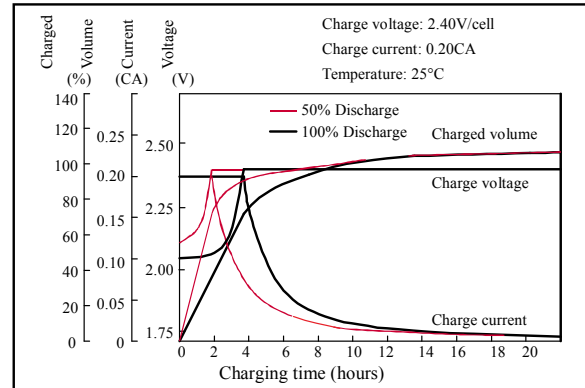
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	686	488	342	209	154	121	101	89.2	71.9	60.8	32.1
1.65V/cell	670	478	335	207	153	120	101	88.7	71.4	60.7	32.0
1.70V/cell	645	464	325	206	152	120	100	88.1	70.9	60.5	31.9
1.75V/cell	623	452	318	202	151	119	99.3	87.5	70.4	60.1	31.7
1.80V/cell	590	436	308	197	148	115	96.3	84.8	68.3	59.7	31.5

Note 1: Above characteristics data can be obtained within three charge and discharge cycles.

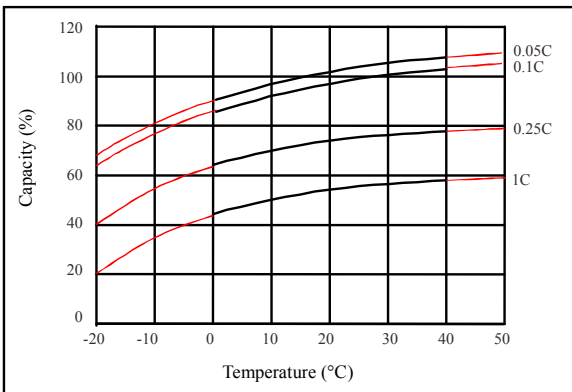
● Discharge characteristics (25°C)



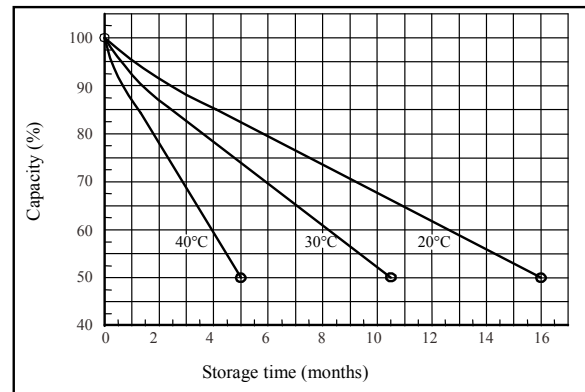
● Charging characteristics (25°C)



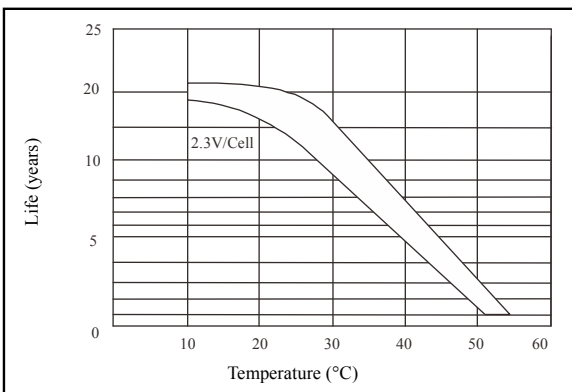
● Temperature effects on capacity



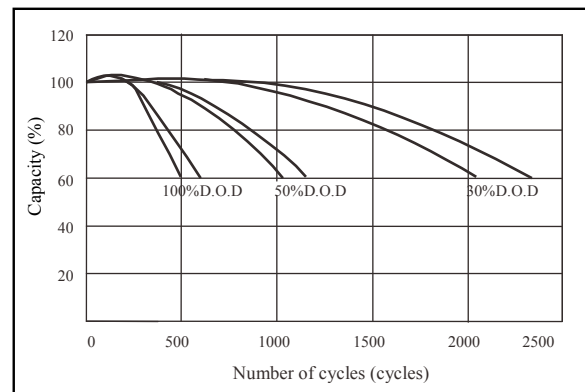
● Self-discharge characteristics



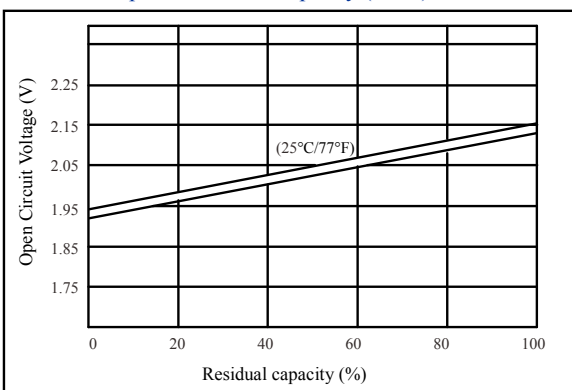
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

