

## NP2-2000Ah 2V2000Ah

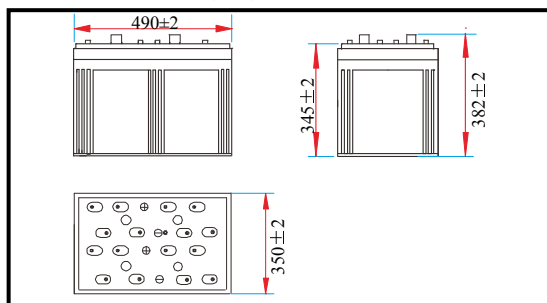
### Valve Regulated Lead Acid Battery



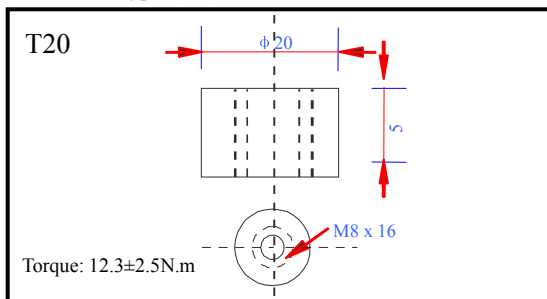
#### ● Specifications

Nominal voltage	2V (2 cells per unit)	
Rated capacity (10HR)	2000Ah/10.8V	
Dimensions	Length	490±2mm (19.29inch)
	Width	350±2mm (13.78inch)
	Height	345±2mm (13.58inch)
	Total height	382±2mm (15.04inch)
Approx. weight	124.00kg (273.37lbs)±3%	

#### ● Outer dimensions (mm)



#### ● Terminal type (mm)



#### ● Characteristics

Capacity (25°C)	10HR (1.80V)	2000Ah
	3HR (1.80V)	1500Ah
	1HR (1.75V)	1100Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.18mΩ
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 2.50V Temperature compensation: -5mV/°C/Block
Maximum charging current		400A
Maximum discharge current		10000A (5 sec.)
Design life	15 years for floating (25°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	Sulfuric acid	Rubber	Copper

#### ● Constant current discharge characteristics unit: Ampere/Block (at 25°C, 77°F)

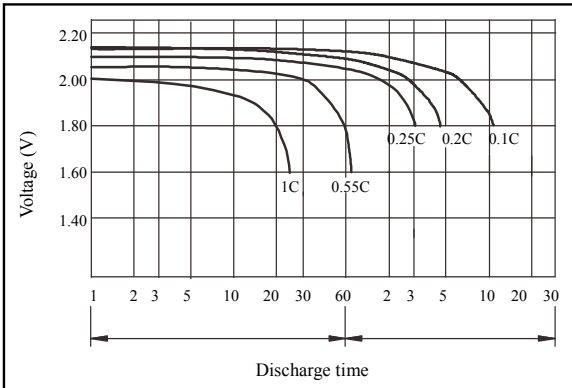
F.V/Time	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h
1.60V/cell	1820	1260	737	530	424	365	314	248	205	108	92.4
1.65V/cell	1784	1222	733	527	422	363	312	246	204	108	92.3
1.70V/cell	1729	1184	726	524	419	361	310	245	204	107	92.0
1.75V/cell	1687	1147	715	520	416	358	308	243	202	107	91.4
1.80V/cell	1625	1109	697	504	404	347	299	236	201	106	90.8

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

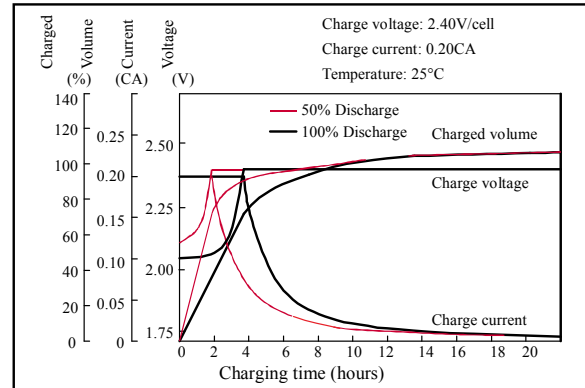
F.V/Time	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h
1.60V/cell	3403	2394	1422	1040	832	719	619	493	407	216	186
1.65V/cell	3335	2322	1414	1033	827	715	615	490	406	215	185
1.70V/cell	3233	2250	1401	1026	821	710	611	487	405	215	185
1.75V/cell	3155	2179	1380	1019	815	705	607	484	403	213	184
1.80V/cell	3039	2107	1345	989	791	684	589	469	400	212	183

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

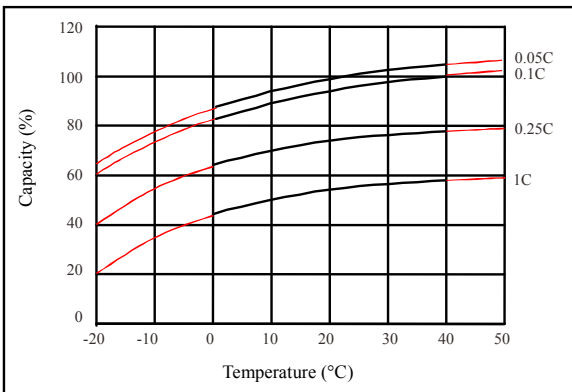
### ● Discharge characteristics (25°C)



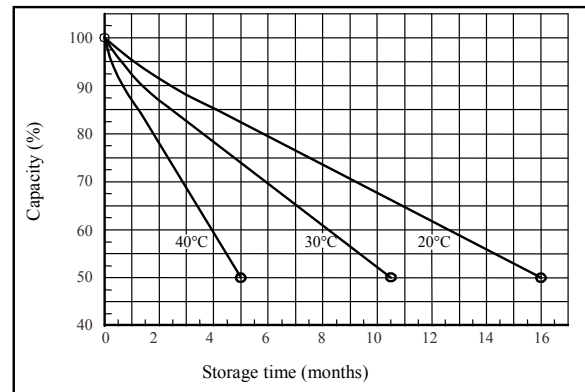
### ● Charging characteristics (25°C)



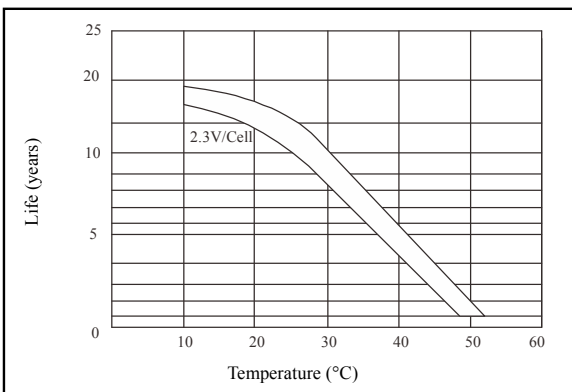
### ● Temperature effects on capacity



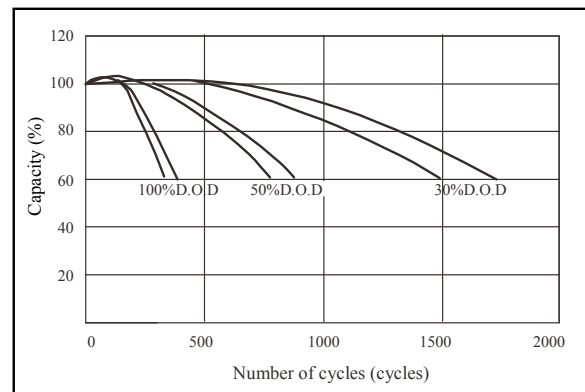
### ● Self-discharge characteristics



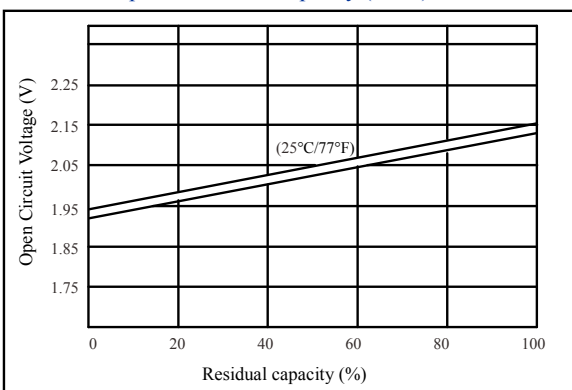
### ● Floating life on temperature



### ● Cycle life on D.O.D (25°C)



### ● Relationship for OCV and capacity (25°C)



### ● Relationship for charging voltage and temperature

