

## NPD2-800Ah 2V800Ah

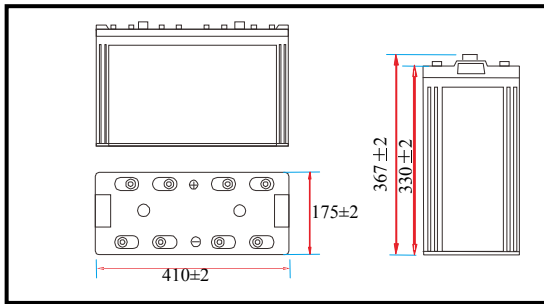
### Valve Regulated Lead Acid Battery



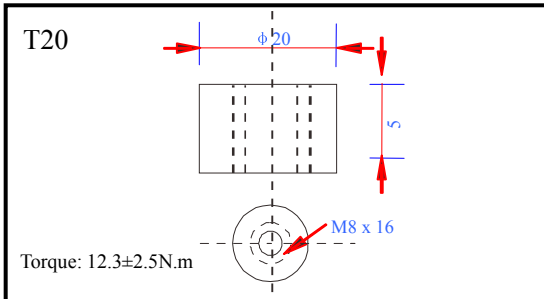
#### ● Specifications

Nominal voltage	2V (2 cells per unit)	
Rated capacity (10HR)	800Ah/1.8V	
Dimensions	Length	410±2mm (16.14inch)
	Width	175±2mm (6.89inch)
	Height	330±2mm (12.99inch)
	Total height	367±2mm (14.45inch)
Approx. weight	53.00kg (116.80lbs)±3%	

#### ● Outer dimensions (mm)



#### ● Terminal type (mm)



#### ● Characteristics

Capacity (25°C)	10HR (1.80V)	800Ah
	3HR (1.80V)	630Ah
	1HR (1.75V)	470Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.35mΩ
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		160A
Maximum discharge current		4400A (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)

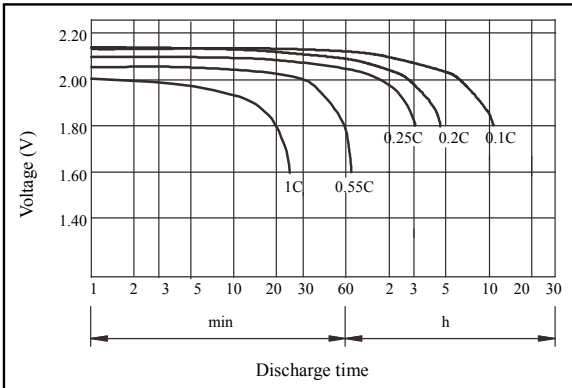
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	1168	764	529	309	223	178	153	132	104	85.9	45.3
1.65V/cell	1140	749	513	308	221	177	152	131	103	85.8	45.2
1.70V/cell	1098	726	497	305	220	176	151	130	103	85.5	45.1
1.75V/cell	1060	709	482	300	218	175	150	129	102	85.0	44.8
1.80V/cell	1004	683	466	293	212	169	146	125	99	84.4	44.5

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

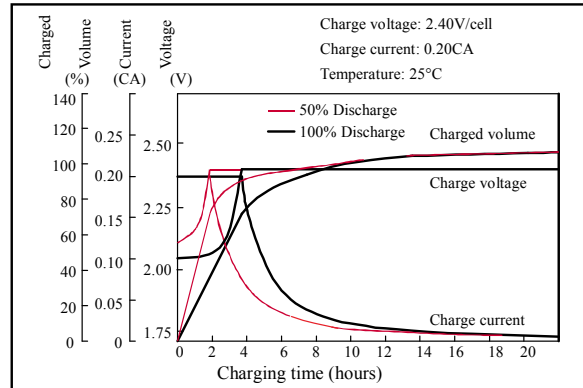
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	2137	1429	1005	597	437	349	302	260	207	171	90.6
1.65V/cell	2085	1401	975	594	434	347	300	258	206	171	90.5
1.70V/cell	2009	1358	945	588	431	345	298	257	205	170	90.2
1.75V/cell	1940	1325	915	580	428	342	296	255	203	169	89.7
1.80V/cell	1838	1276	885	565	415	332	287	247	197	168	89.0

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

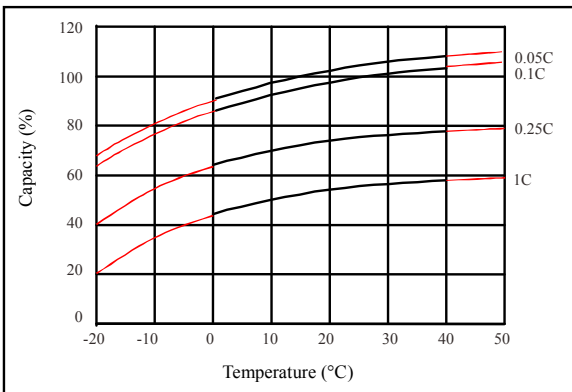
### ● Discharge characteristics (25°C)



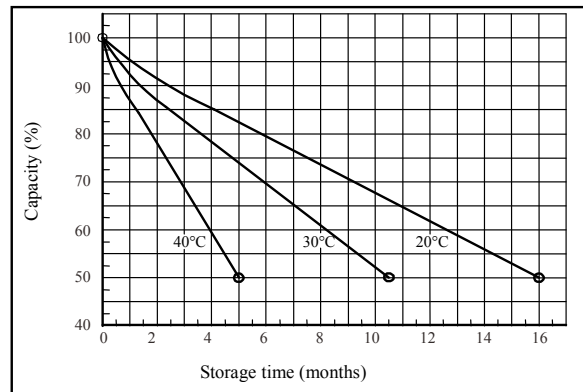
### ● Charging characteristics (25°C)



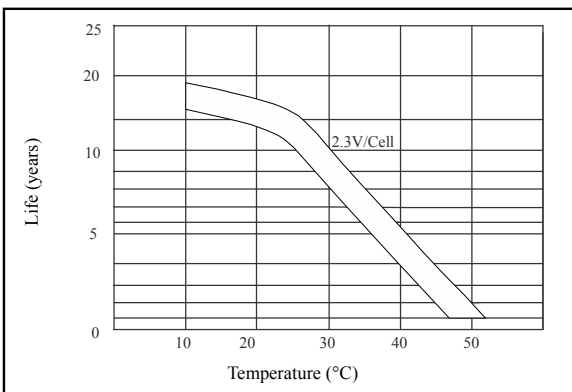
### ● Temperature effects on capacity



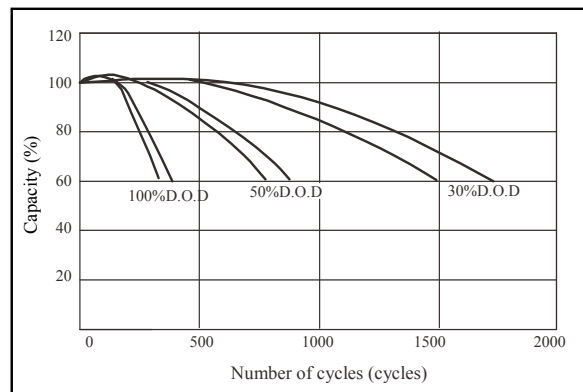
### ● Self-discharge characteristics



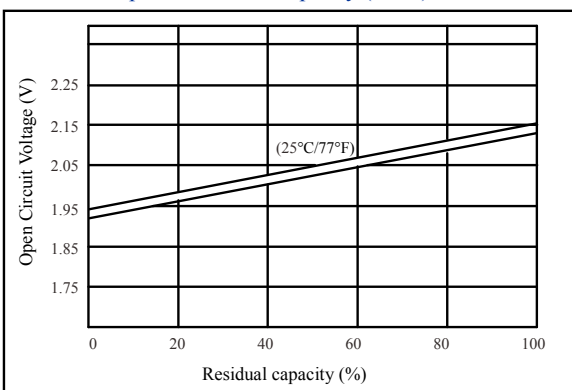
### ● Floating life on temperature



### ● Cycle life on D.O.D (25°C)



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



### ● Relationship for charging voltage and temperature

