

NPD2-400Ah 2V400Ah

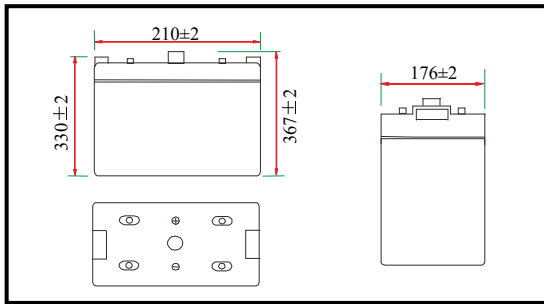
Valve Regulated Lead Acid Battery



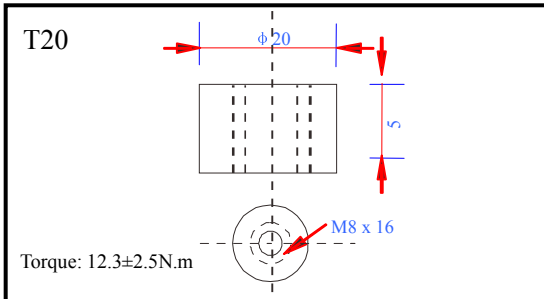
Specifications

Nominal voltage	2V (1 cell per unit)	
Rated capacity (10HR)	400Ah/1.8V	
Dimensions	Length	210±2mm (8.27inch)
	Width	176±2mm (6.93inch)
	Height	330±2mm (12.99inch)
	Total height	367±2mm (14.45inch)
Approx. weight	27.00kg (59.50lbs)±3%	

Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	10HR (1.80V)	400Ah
	3HR (1.80V)	315Ah
	1HR (1.75V)	240Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.6mΩ
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		80A
Maximum discharge current		2500A (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)

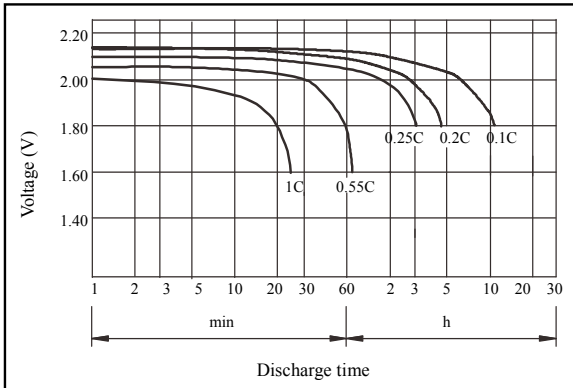
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	584	382	265	155	111	89.1	76.7	66.0	52.1	43.0	22.7
1.65V/cell	570	375	257	154	111	88.6	76.2	65.6	51.7	42.9	22.6
1.70V/cell	549	363	249	152	110	88.0	75.7	65.1	51.4	42.8	22.5
1.75V/cell	530	354	241	150	109	87.4	75.2	64.7	51.0	42.5	22.4
1.80V/cell	502	341	233	146	106	84.7	72.9	62.7	49.5	42.2	22.3

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

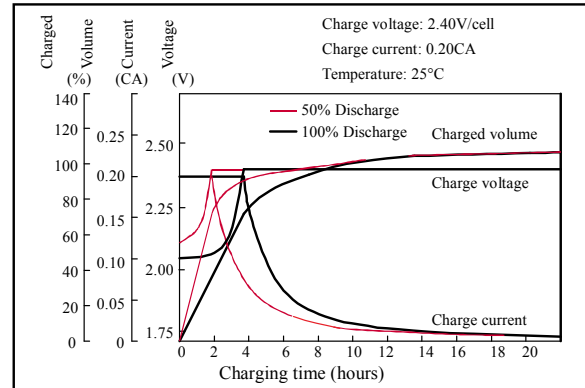
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	1068	715	503	299	218	175	151	130	104	85.5	45.3
1.65V/cell	1043	700	488	297	217	174	150	129	103	85.3	45.2
1.70V/cell	1004	679	473	294	216	172	149	128	102	85.1	45.1
1.75V/cell	970	663	457	290	214	171	148	127	102	84.6	44.8
1.80V/cell	919	638	442	282	208	166	144	124	98.5	84.0	44.5

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

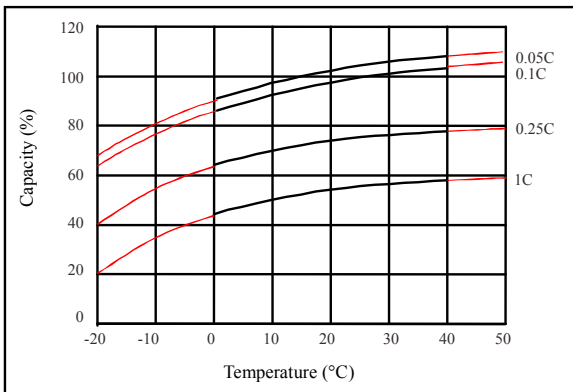
● Discharge characteristics (25°C)



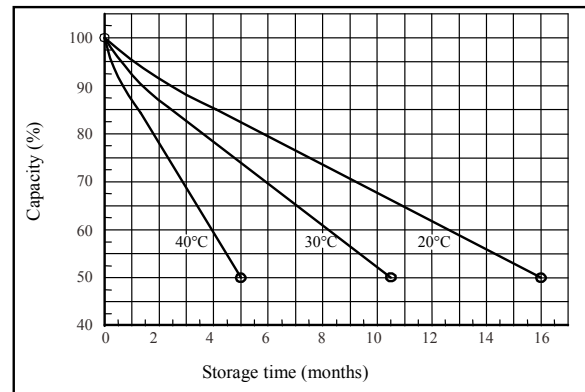
● Charging characteristics (25°C)



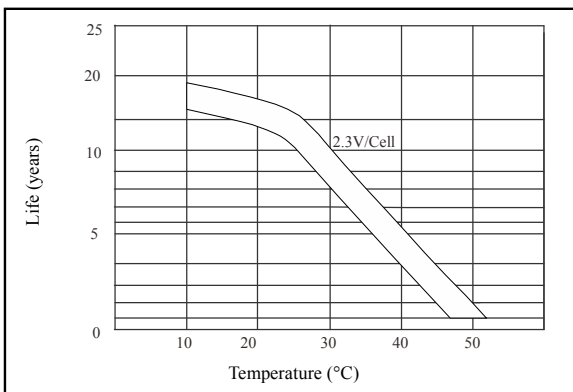
● Temperature effects on capacity



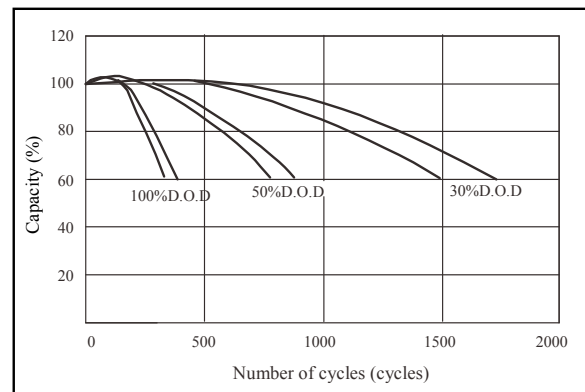
● Self-discharge characteristics



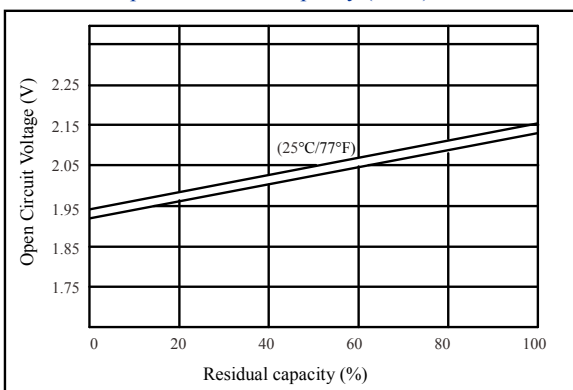
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

