

NPD2-300Ah 2V300Ah

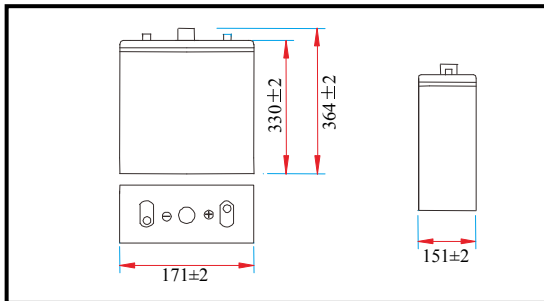
Valve Regulated Lead Acid Battery



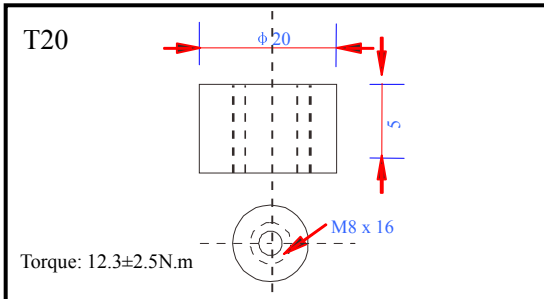
● Specifications

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 (43.00lbs)±3%	

● Outer dimensions (mm)



● Terminal type (mm)



● Characteristics

Capacity (25°C)	10HR (1.80V)	300Ah
	3HR (1.80V)	240Ah
	1HR (1.75V)	180Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.75mΩ
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		60A
Maximum discharge current		2100A (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)

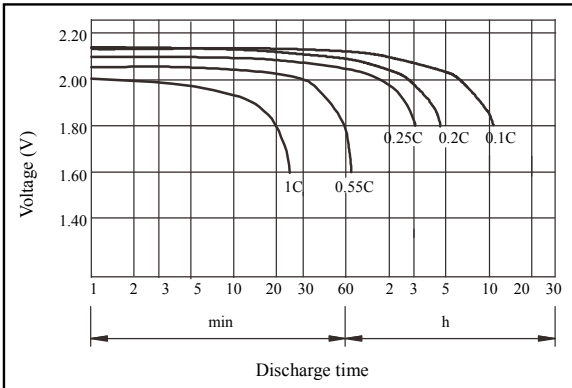
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	445	291	202	118	84.9	67.9	58.4	50.3	39.7	32.7	17.3
1.65V/cell	434	285	196	117	84.4	67.5	58.1	50.0	39.4	32.7	17.2
1.70V/cell	418	277	190	116	83.8	67.0	57.7	49.6	39.2	32.6	17.2
1.75V/cell	404	270	183	114	83.2	66.6	57.3	49.3	38.9	32.4	17.1
1.80V/cell	383	260	177	112	80.7	64.6	55.6	47.8	37.7	32.2	17.0

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

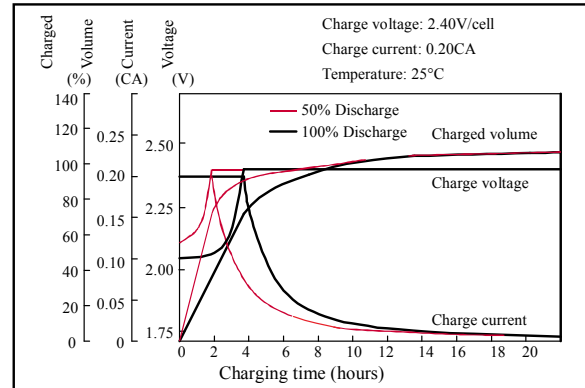
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	814	545	383	228	166	133	115	99.0	78.9	65.2	34.5
1.65V/cell	794	534	372	226	165	132	114	98.4	78.5	65.0	34.5
1.70V/cell	765	517	360	224	164	131	114	97.8	77.9	64.8	34.4
1.75V/cell	739	505	349	221	163	130	113	97.1	77.4	64.4	34.2
1.80V/cell	700	486	337	215	158	127	109	94.2	75.1	64.0	33.9

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

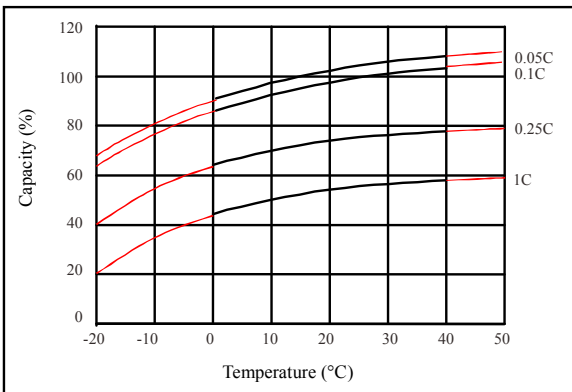
● Discharge characteristics (25°C)



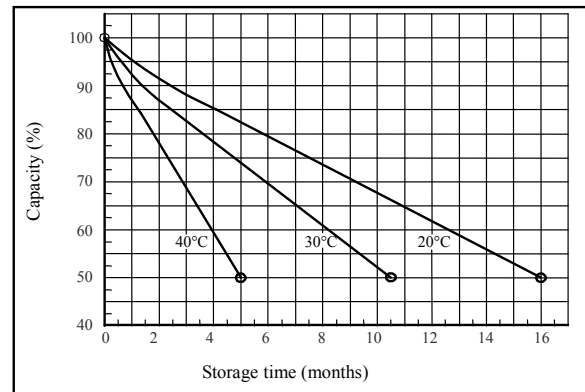
● Charging characteristics (25°C)



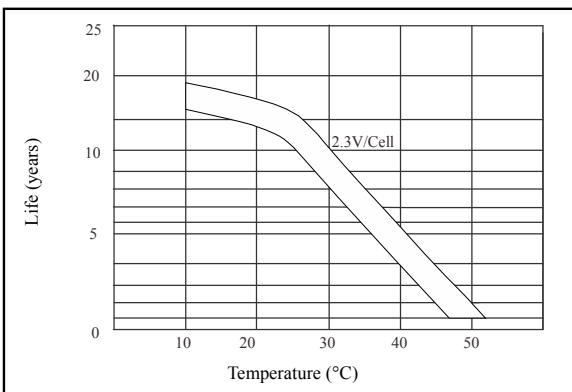
● Temperature effects on capacity



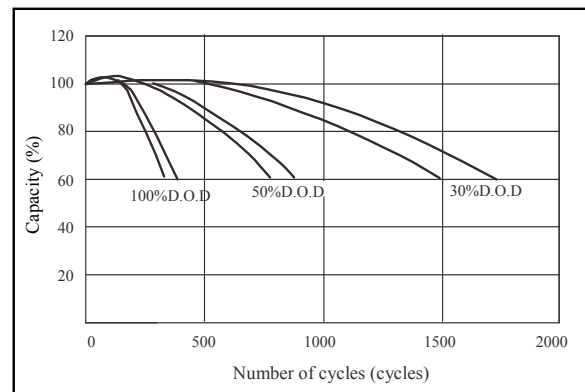
● Self-discharge characteristics



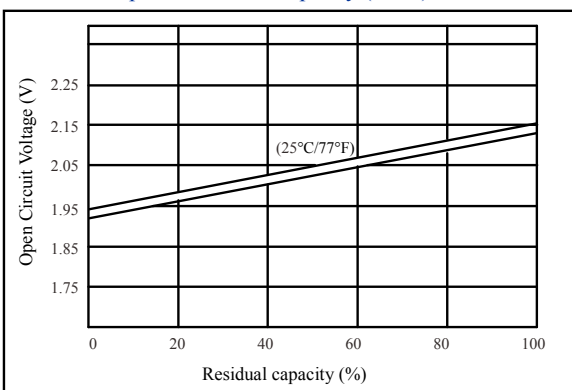
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

