

NPD2-600Ah 2V600Ah

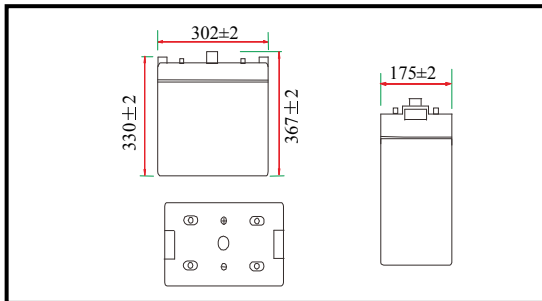
Valve Regulated Lead Acid Battery



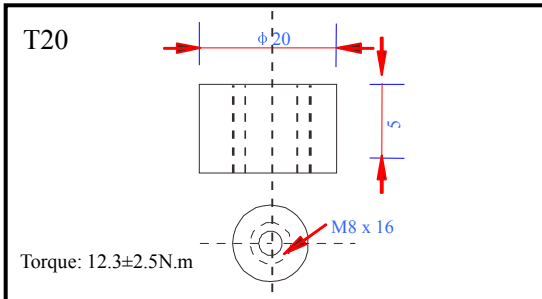
Specifications

Nominal voltage	2V (1 cell per unit)	
Rated capacity (10HR)	600Ah/1.8V	
Dimensions	Length	302±2mm (11.89inch)
	Width	175±2mm (6.89inch)
	Height	330±2mm (12.99inch)
	Total height	367±2mm (14.45inch)
Approx. weight	38.00kg (83.80lbs)±3%	

Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	10HR (1.80V)	600Ah
	3HR (1.80V)	477Ah
	1HR (1.75V)	350Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.45mΩ
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		120A
Maximum discharge current		3600A (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)

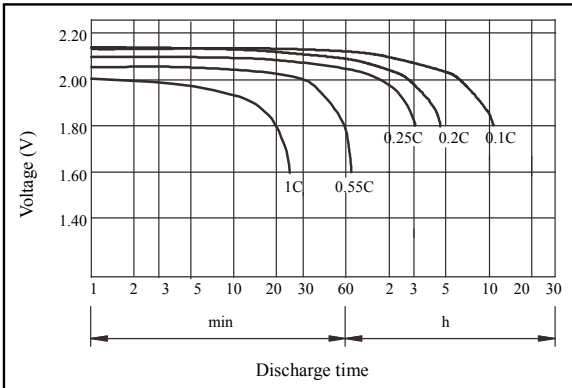
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	876	573	397	232	167	134	115	99	78.1	64.5	34.0
1.65V/cell	855	562	385	231	166	133	114	98.4	77.6	64.3	33.9
1.70V/cell	823	545	373	229	165	132	114	97.7	77.1	64.1	33.8
1.75V/cell	795	531	361	225	164	131	113	97.0	76.5	63.8	33.6
1.80V/cell	753	512	349	220	159	127	109	94.1	74.2	63.3	33.4

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

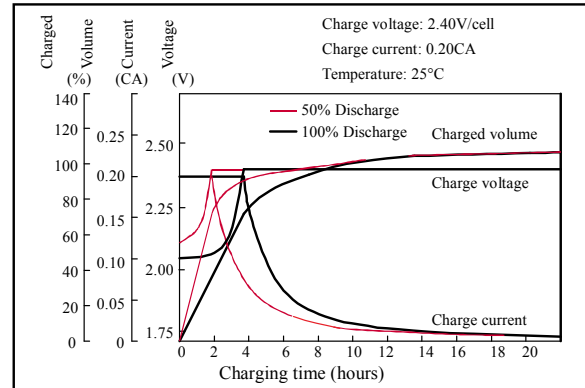
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	1603	1072	754	448	327	262	227	195	155	128	68.0
1.65V/cell	1564	1051	731	445	326	260	225	194	154	128	67.8
1.70V/cell	1506	1018	709	441	323	259	224	192	153	128	67.6
1.75V/cell	1455	984	686	435	321	257	222	191	152	127	67.2
1.80V/cell	1378	957	664	424	311	249	215	185	148	126	66.8

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

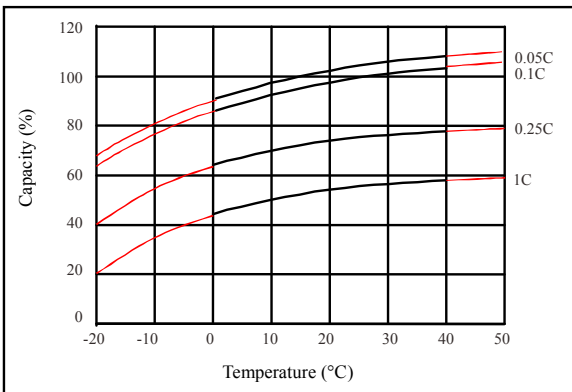
● Discharge characteristics (25°C)



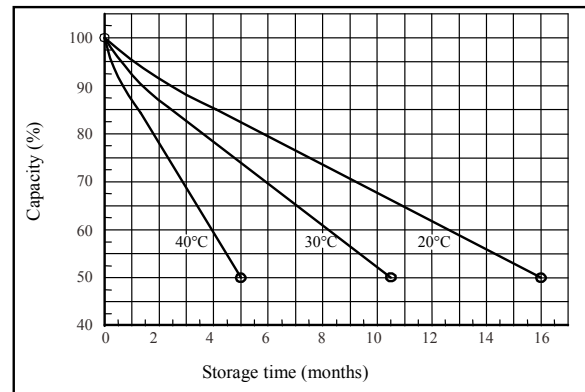
● Charging characteristics (25°C)



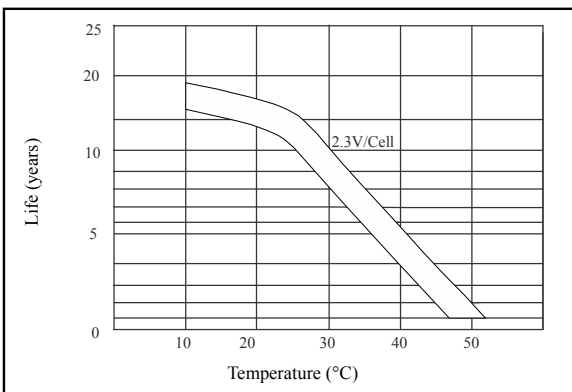
● Temperature effects on capacity



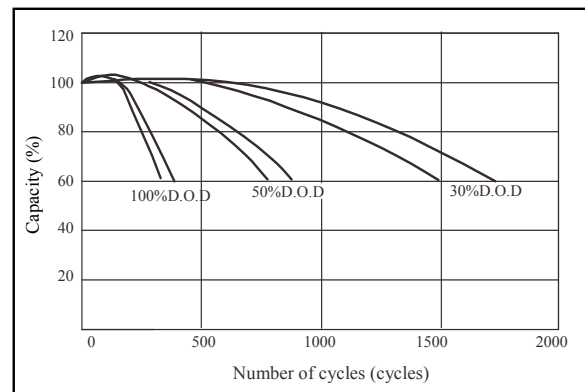
● Self-discharge characteristics



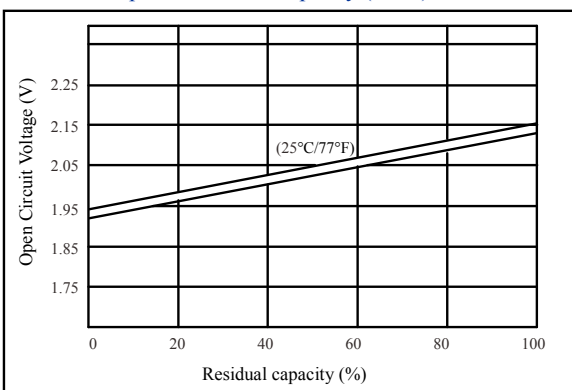
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

