

NP2-100Ah 2V100Ah

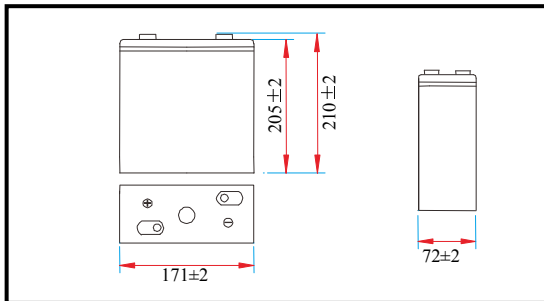
Valve Regulated Lead Acid Battery



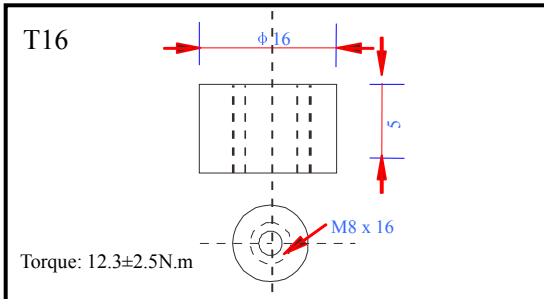
Specifications

Nominal voltage	2V (1 cell per unit)	
Rated capacity (10HR)	100Ah/10.8V	
Dimensions	Length	171±2mm (6.73inch)
	Width	72±2mm (2.83inch)
	Height	205±2mm (8.07inch)
	Total height	210±2mm (8.27inch)
Approx. weight	5.30kg (11.70lbs)±4%	

Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	10HR (1.80V)	100Ah
	3HR (1.80V)	75Ah
	1HR (1.75V)	55Ah
Terminal type		T16
Internal resistance (Fully charged, 25°C)		Approx. 0.8mΩ
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		30A
Maximum discharge current		800A (5 sec.)
Design life	10 years for floating (25°C)	
	Eurobat (20°C) 10-12 years, 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)

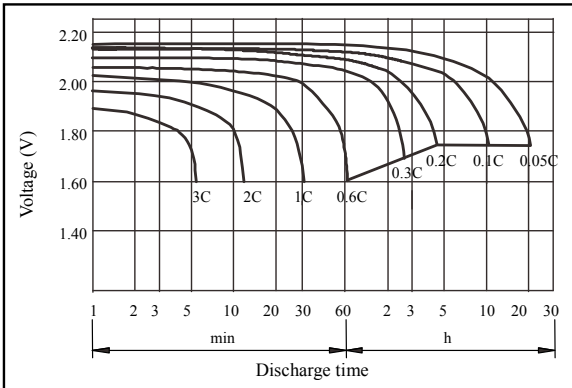
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	218	168	101	61.8	36.5	26.3	21.0	18.0	12.3	10.2	5.40
1.65V/cell	211	164	98.5	60.9	36.3	26.2	20.9	17.8	12.3	10.2	5.38
1.70V/cell	203	158	95.5	59.3	36.0	26.0	20.7	17.7	12.2	10.1	5.37
1.75V/cell	194	153	93.2	57.5	35.5	25.8	20.6	17.6	12.1	10.1	5.34
1.80V/cell	183	144	89.7	55.6	34.6	25.0	20.0	17.1	11.7	10.0	5.30

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

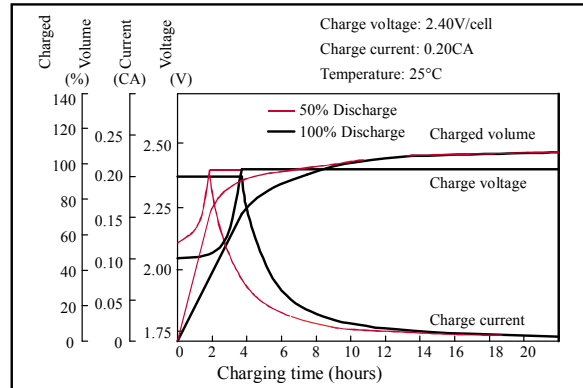
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	392	307	188	117	70.5	51.6	41.2	35.4	24.4	20.3	10.8
1.65V/cell	381	300	184	116	70.1	51.3	40.9	35.2	24.3	20.2	10.8
1.70V/cell	365	289	179	113	69.5	50.9	40.7	34.9	24.1	20.2	10.7
1.75V/cell	349	279	174	109	68.4	50.6	40.4	34.7	24.0	20.0	10.7
1.80V/cell	330	264	168	106	66.7	49.1	39.2	33.6	23.2	19.9	10.6

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

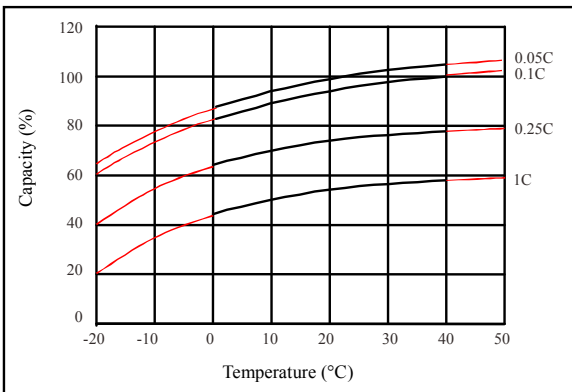
● Discharge characteristics (25°C)



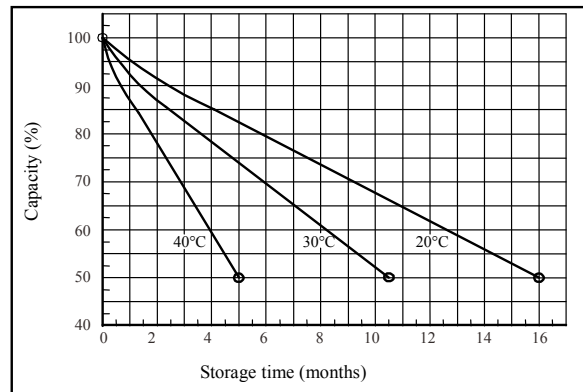
● Charging characteristics (25°C)



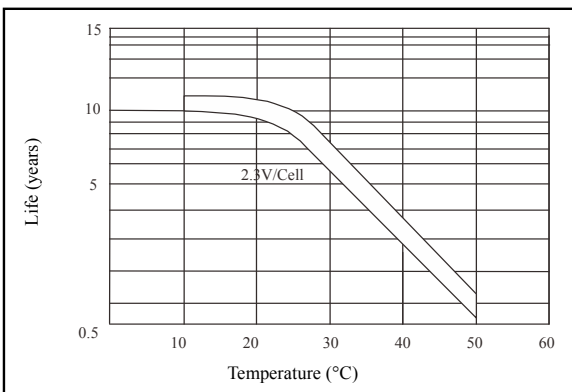
● Temperature effects on capacity



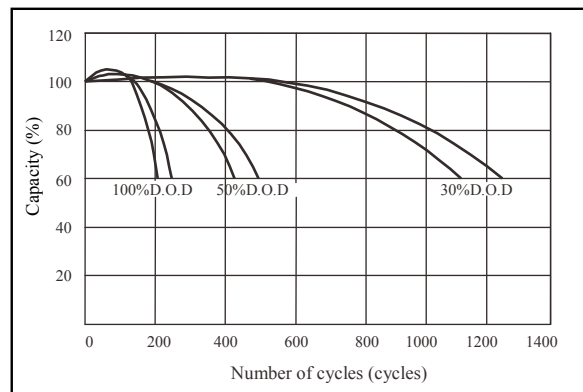
● Self-discharge characteristics



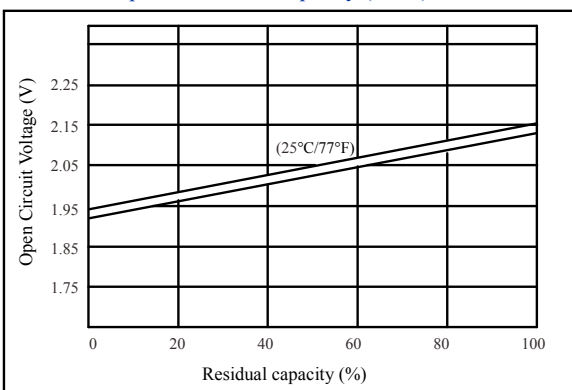
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

