

## NP2-150Ah 2V150Ah

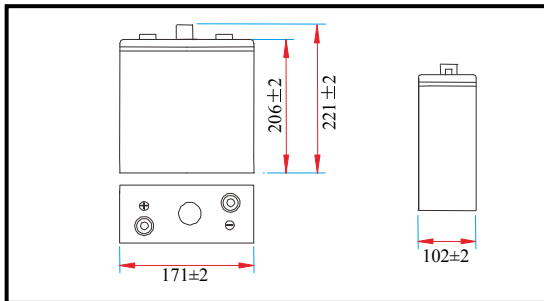
### Valve Regulated Lead Acid Battery



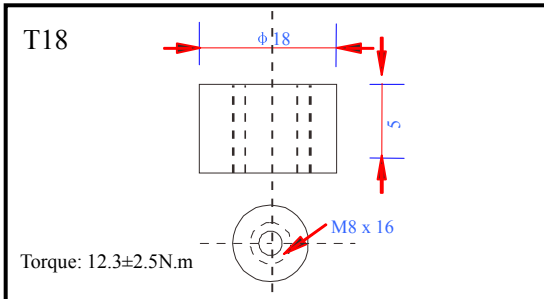
#### Specifications

Nominal voltage	2V (1 cell per unit)	
Rated capacity (10HR)	150Ah/10.8V	
Dimensions	Length	171±2mm (6.73inch)
	Width	102±2mm (4.02inch)
	Height	206±2mm (8.11inch)
	Total height	221±2mm (8.70inch)
Approx. weight	8.00kg (17.60lbs)±4%	

#### Outer dimensions (mm)



#### Terminal type (mm)



#### Characteristics

Capacity (25°C)	10HR (1.80V)	150Ah
	3HR (1.80V)	112.5Ah
	1HR (1.75V)	85Ah
Terminal type		T18
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		45A
Maximum discharge current		1200A (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)

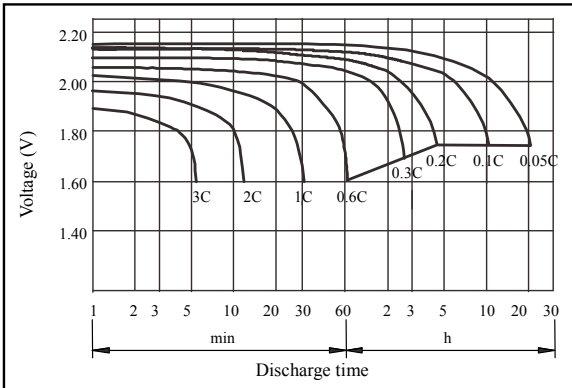
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	327	252	151	92.7	54.8	39.5	31.5	26.9	18.5	15.3	8.09
1.65V/cell	317	246	148	91.3	54.5	39.2	31.3	26.8	18.4	15.2	8.08
1.70V/cell	304	237	143	89.0	54.0	39.0	31.1	26.6	18.3	15.2	8.05
1.75V/cell	291	229	140	86.2	53.2	38.7	30.9	26.4	18.2	15.1	8.01
1.80V/cell	275	217	135	83.4	51.8	37.5	30.0	25.6	17.6	15.0	7.95

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

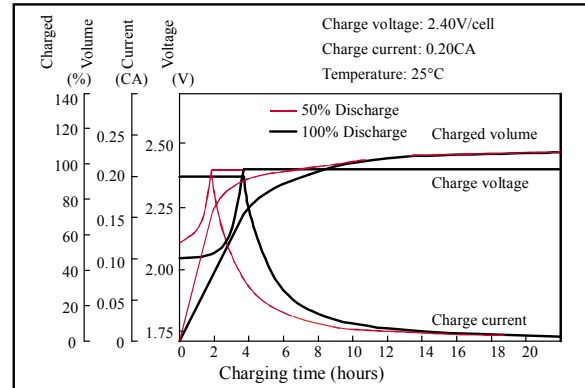
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	589	461	282	176	106	77.4	61.8	53.0	36.7	30.4	16.2
1.65V/cell	571	450	276	173	105	76.9	61.4	52.7	36.4	30.3	16.2
1.70V/cell	547	433	268	169	104	76.4	61.0	52.4	36.2	30.2	16.1
1.75V/cell	524	419	261	164	103	75.9	60.6	52.0	35.9	30.1	16.0
1.80V/cell	494	397	252	159	100	73.6	58.7	50.4	34.9	29.9	15.9

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

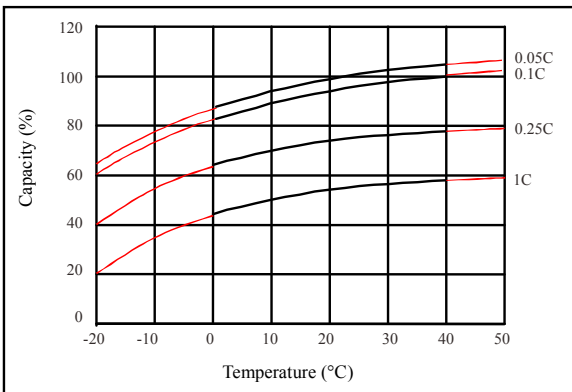
### ● Discharge characteristics (25°C)



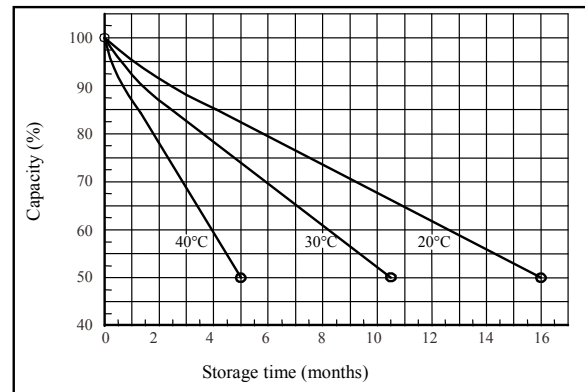
### ● Charging characteristics (25°C)



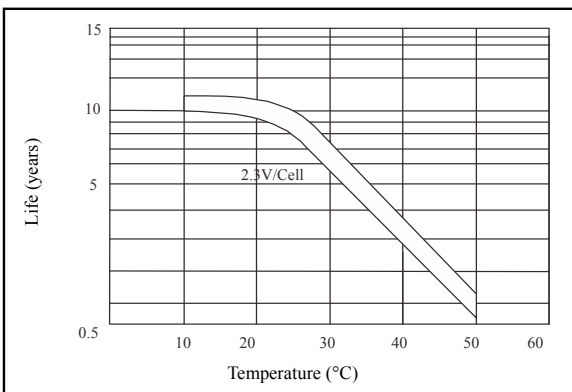
### ● Temperature effects on capacity



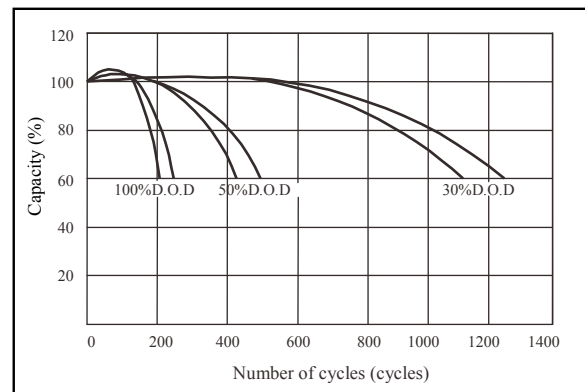
### ● Self-discharge characteristics



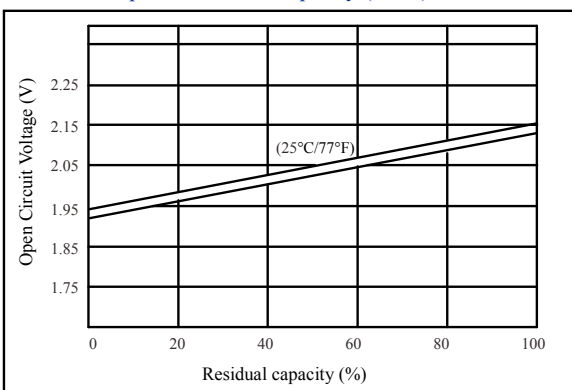
### ● Floating life on temperature



### ● Cycle life on D.O.D (25°C)



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



### ● Relationship for charging voltage and temperature

