

## NPD12-120Ah 12V120Ah

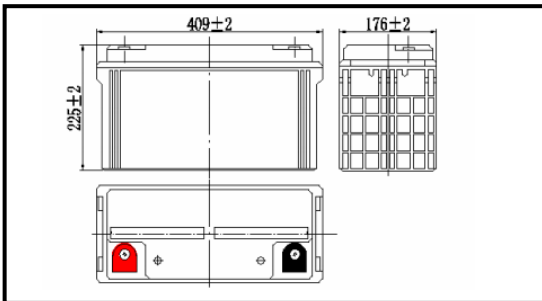
### Valve Regulated Lead Acid Battery



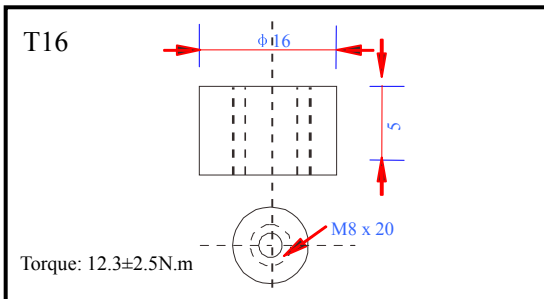
#### Specifications

Nominal voltage	12V (6 cells per unit)	
Rated capacity (10HR)	120Ah/10.8V	
Dimensions	Length	409±2mm (16.10inch)
	Width	176±2mm (6.93inch)
	Height	225±2mm (8.86inch)
	Total height	225±2mm (8.86inch)
Approx. weight	36.00kg (79.40lbs)±3%	

#### Outer dimensions (mm)



#### Terminal type (mm)



#### Characteristics

Capacity (25°C)	10HR (10.8V)	120Ah
	3HR (10.8V)	91.5Ah
	1HR (10.5V)	70Ah
Terminal type		T16
Internal resistance (Fully charged, 25°C)		Approx. 4mΩ
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)		13.50 to 13.80V Temperature compensation: -18mV/°C/Block
Cyclic charging voltage (25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C/Block
Maximum charging current		36A
Maximum discharge current		950A (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)

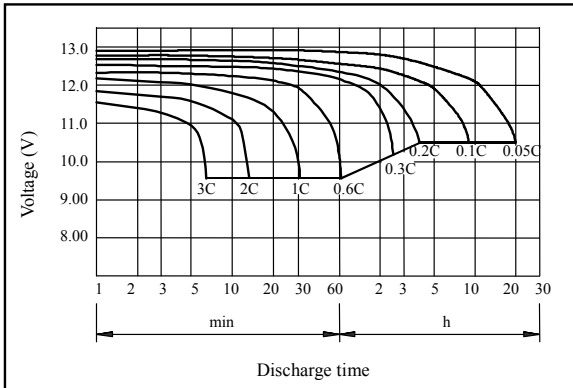
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	268	207	124	76.0	44.9	32.4	25.8	22.1	15.2	12.5	6.64
9.90V	260	202	121	74.9	44.7	32.2	25.7	22.0	15.1	12.5	6.62
10.2V	249	194	117	73.0	44.3	32.0	25.5	21.8	15.0	12.5	6.60
10.5V	239	188	115	70.7	43.6	31.7	25.3	21.6	14.9	12.4	6.56
10.8V	225	178	110	68.4	42.5	30.8	24.6	21.0	14.4	12.3	6.52

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

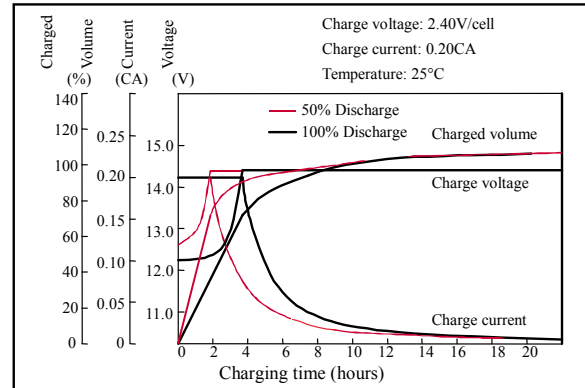
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	2896	2269	1387	867	520	381	304	261	180	150	79.6
9.90V	2809	2214	1359	854	517	378	302	259	179	149	79.5
10.2V	2693	2133	1318	832	513	376	300	258	178	149	79.2
10.5V	2577	2060	1286	806	505	373	298	256	177	148	78.8
10.8V	2433	1951	1239	780	492	362	289	248	172	147	78.2

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

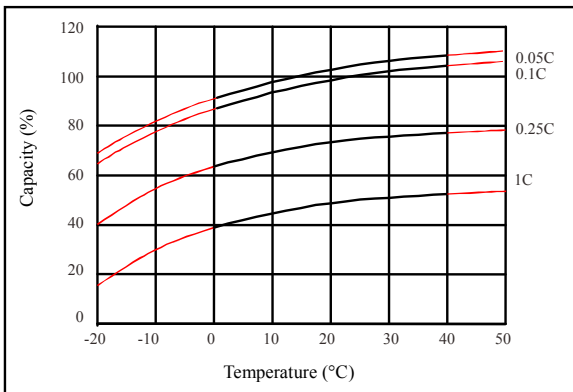
### ● Discharge characteristics (25°C)



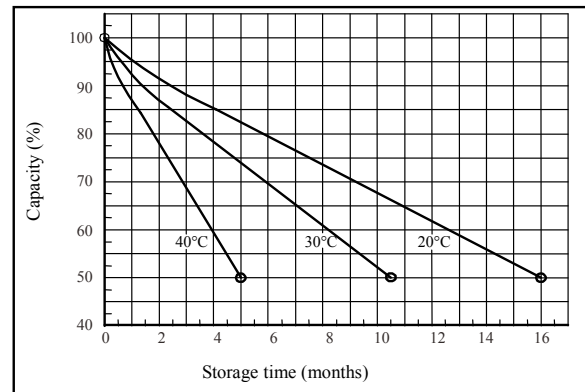
### ● Charging characteristics (25°C)



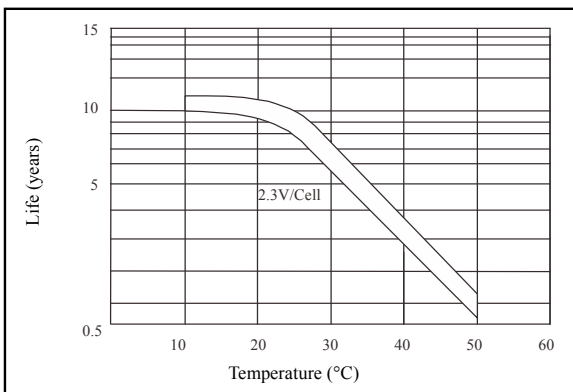
### ● Temperature effects on capacity



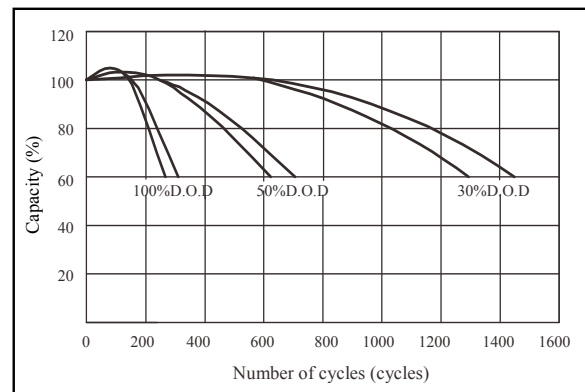
### ● Self-discharge characteristics



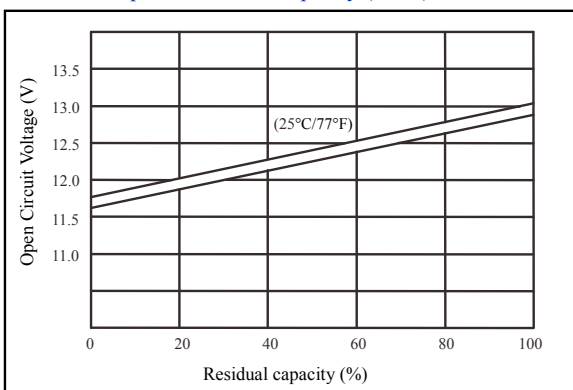
### ● Floating life on temperature



### ● Cycle life on D.O.D (25°C)



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



### ● Relationship for charging voltage and temperature

