

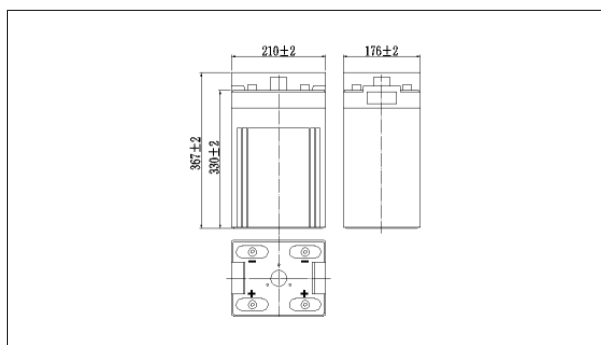
**NPD2-400Ah 2V400Ah**



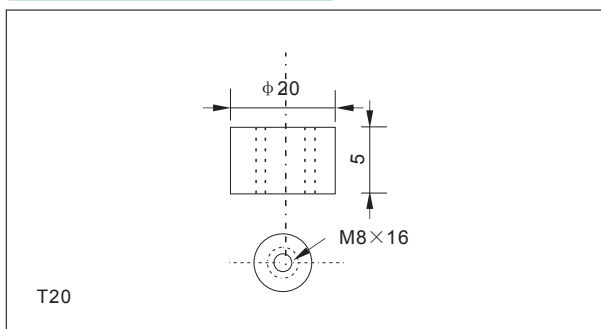
● **Specifications**

Nominal Voltage		2V
Rated capacity (10 hour rate)		400Ah
Dimensions	Length	210±2mm(8.27inch)
	Width	176±2mm(6.93inch)
	Height	330±2mm(12.99inch)
	Total Height	367±2mm(14.45inch)
Approx. Weight		27kg(59.5lbs)±3%

● **Outer dimensions (mm)**



● **Terminal Type (mm)**



● **Characteristics**

Capacity (25°C)	10HR(1.8V)	400Ah
	3HR(1.80V)	315Ah
	1HR(1.75V)	240Ah
Terminal type		T20
Internal resistance (Fully charged,25°C)		Approx.0.6m Ω
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
Cyclic charging voltage(25°C)		2.40 to 2.50V Temperature compensation: -5mV/°C
Maximum charging current		80A
Maximum discharge current		2500A(5 sec.)
Designed floating life(20°C)		15 years

● **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:A(25°C,77°F)**

F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	584	382	265	155	111	89.1	76.7	66.0	52.1	43.0	22.7
1.65V	570	375	257	154	111	88.6	76.2	65.6	51.7	42.9	22.6
1.70V	549	363	249	152	110	88.0	75.7	65.1	51.4	42.8	22.5
1.75V	530	354	241	150	109	87.4	75.2	64.7	51.0	42.5	22.4
1.80V	502	341	233	146	106	84.7	72.9	62.7	49.5	42.2	22.3

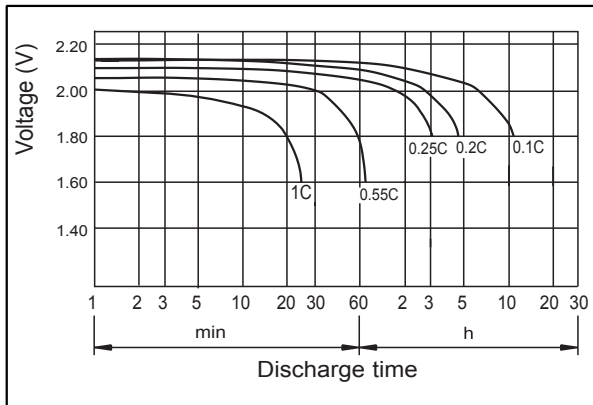
● **Constant Power Discharge Characteristics Unit:W(25°C,77°F)**

F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	1068	715	503	299	218	175	151	130	104	85.5	45.3
1.65V	1043	700	488	297	217	174	150	129	103	85.3	45.2
1.70V	1004	679	473	294	216	172	149	128	102	85.1	45.1
1.75V	970	663	457	290	214	171	148	127	102	84.6	44.8
1.80V	919	638	442	282	208	166	144	124	98.5	84.0	44.5

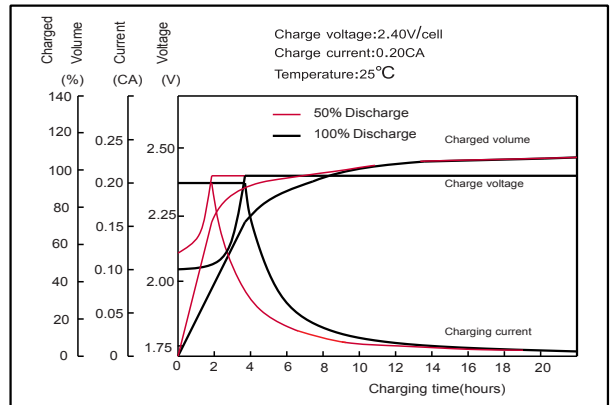
Note: The above characteristics data can be obtained within three charge or discharge cycles.

# NPD2-400Ah 2V400Ah

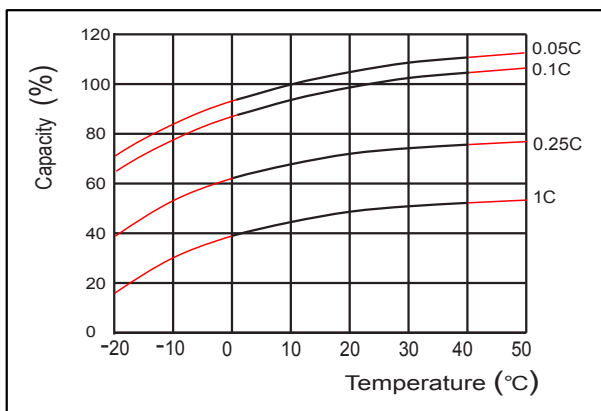
## Discharge characteristics(25°C)



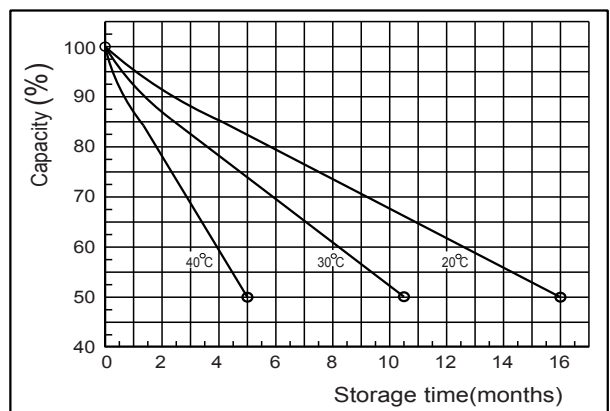
## Charging characteristics



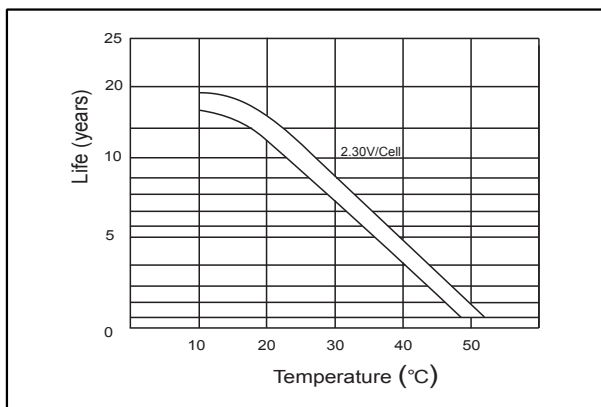
## Effect of Temperature on Capacity



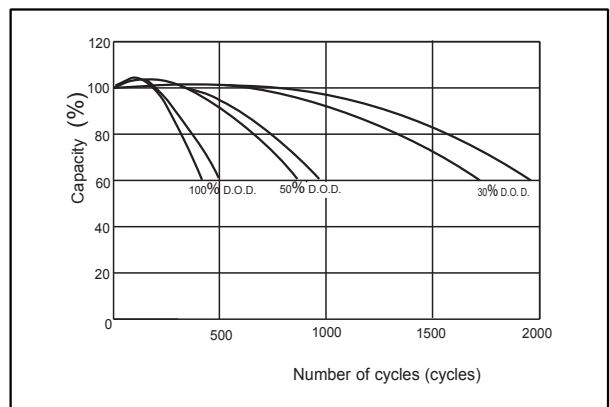
## Self-discharge characteristics



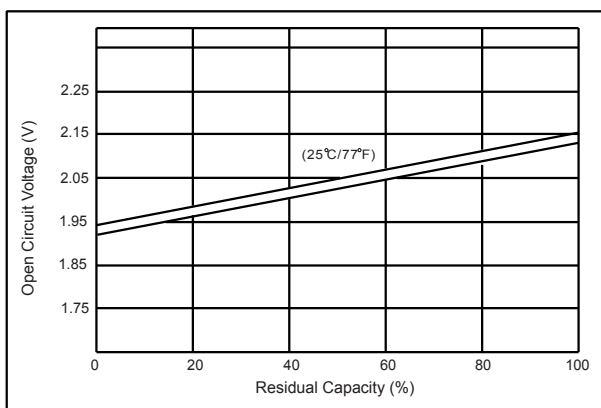
## Temperature effects on float life



## Cycle service life in relation to depth of discharge



## The relationship for OCV and Capacity (25°C)



## The relationship for Charging voltage and Temperature

