

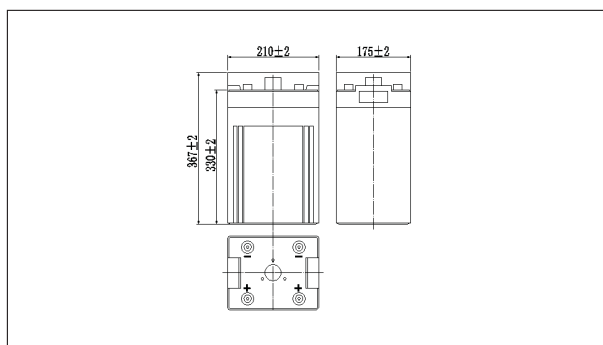
NPG2-400Ah 2V400Ah



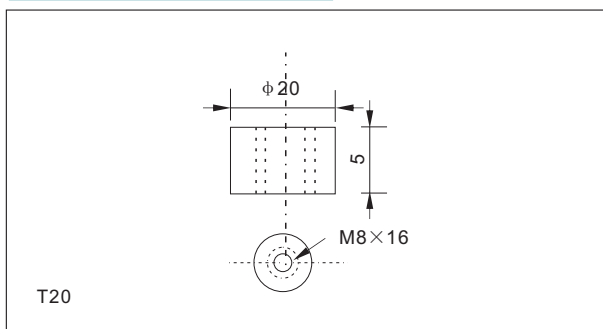
Specifications

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)	300Ah
	1HR(1.75V)	220Ah
Terminal type		T20
Internal resistance (Fully charged,25°C)		Approx.0.65m 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 2.45V Temperature compensation: -5mV/°C
Maximum charging current		80A
Maximum discharge current		2500A(5 sec.)
Designed floating life(20°C)		18 years

Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Gel	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	500	348	240	144	104	82.4	68.5	60.4	48.1	40.7	21.4
1.65V	488	341	235	143	104	81.9	68.1	60.0	47.9	40.6	21.3
1.70V	470	331	228	142	103	81.4	67.7	59.6	47.5	40.5	21.3
1.75V	454	323	223	140	102	80.8	67.2	59.2	47.2	40.3	21.1
1.80V	430	311	216	136	100	78.4	65.2	57.4	45.8	40.0	21.0

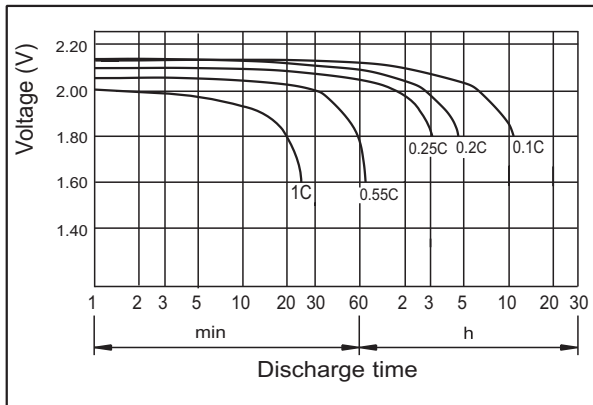
Constant Power Discharge Characteristics Unit:W(25°C,77°F)

F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	915	651	456	278	205	162	135	119	95.8	81.0	42.8
1.65V	893	638	447	277	204	161	134	118	95.2	80.9	42.7
1.70V	860	618	433	274	202	159	133	117	94.6	80.6	42.5
1.75V	831	603	424	270	201	158	132	117	93.9	80.2	42.3
1.80V	787	581	410	263	197	154	128	113	91.1	79.6	42.0

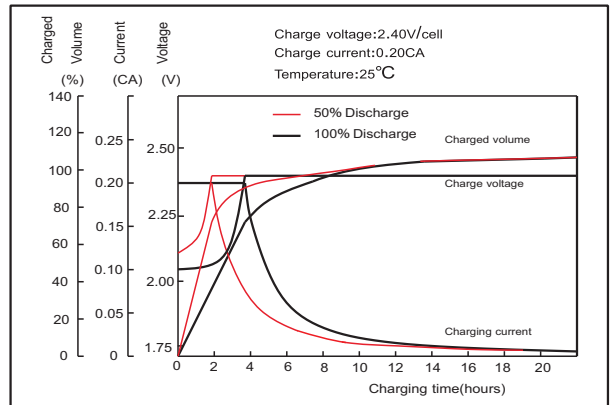
Note: The above characteristics data can be obtained within three charge or discharge cycles.

NPG2-400Ah 2V400Ah

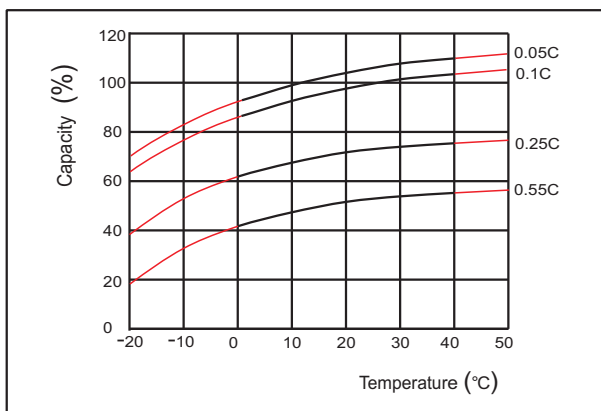
Discharge characteristics(25°C)



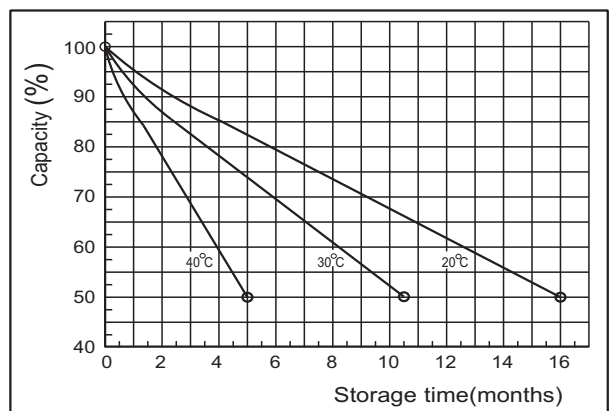
Charging characteristics



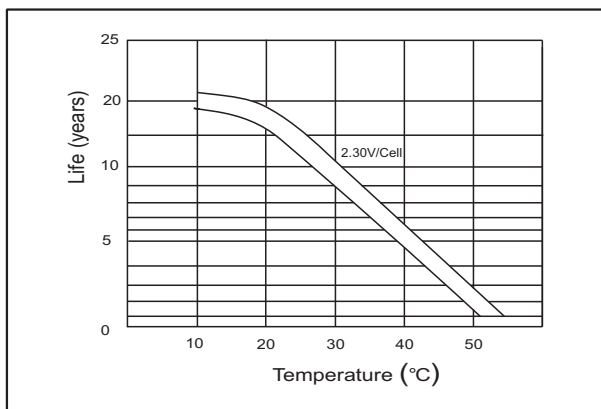
Effect of Temperature on Capacity



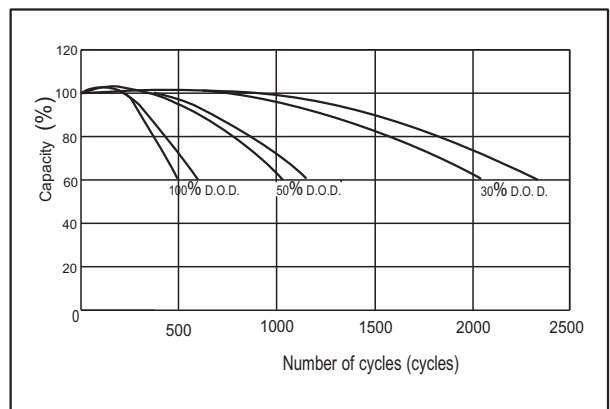
Self-discharge characteristics



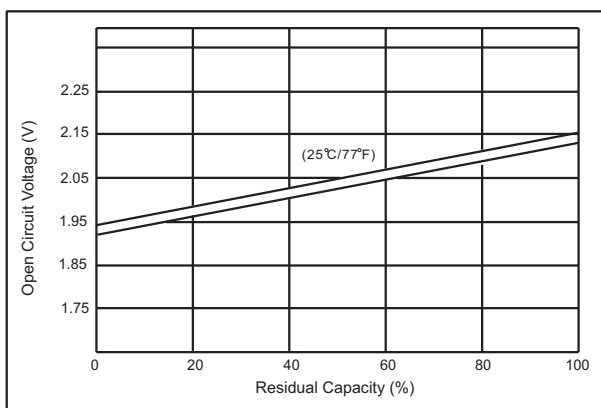
Temperature effects on float life



Cycle service life in relation to depth of discharge



The relationship for OCV and Capacity (25°C)



The relationship for Charging voltage and Temperature

