

NPG2-400Ah 2V400Ah

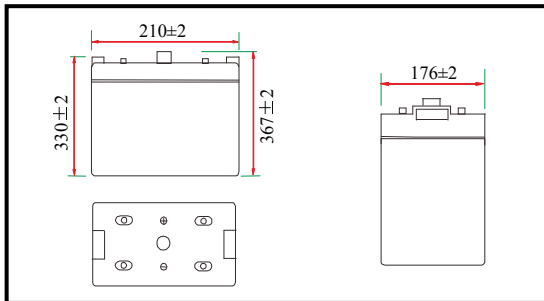
Valve Regulated Lead Acid Battery



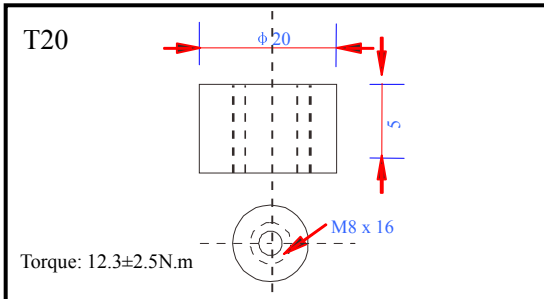
Specifications

Nominal voltage	2V (1 cell per unit)	
Rated capacity (10HR)	400Ah/1.8V	
Dimensions	Length	210±2mm (8.27inch)
	Width	176±2mm (6.93inch)
	Height	330±2mm (12.99inch)
	Total height	367±2mm (14.45inch)
Approx. weight	27.00kg (59.50 lbs)±3%	

Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	10HR (1.80V)	400Ah
	3HR (1.80V)	300Ah
	1HR (1.75V)	220Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.65mΩ
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 2.45V Temperature compensation: -5mV/°C/Block
Maximum charging current		80A
Maximum discharge current		2500A (5 sec.)
Design life	18 years for floating (20°C)	
	Eurobat (20°C) >12 years, very long life.	

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: Ampere/Block (at 25°C, 77°F)

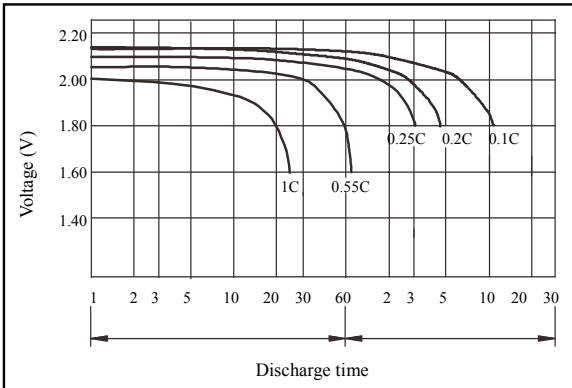
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	500	348	240	144	104	82.4	68.5	60.4	48.1	40.7	21.4
1.65V/cell	488	341	235	143	104	81.9	68.1	60.0	47.9	40.6	21.3
1.70V/cell	470	331	228	142	103	81.4	67.7	59.6	47.5	40.5	21.3
1.75V/cell	454	323	223	140	102	80.8	67.2	59.2	47.2	40.3	21.1
1.80V/cell	430	311	216	136	100	78.4	65.2	57.4	45.8	40.0	21.0

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

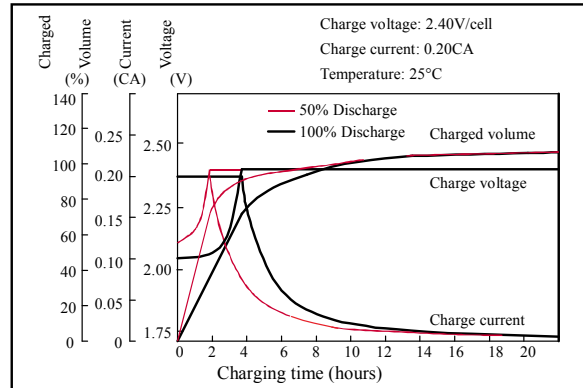
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	915	651	456	278	205	162	135	119	95.8	81.0	42.8
1.65V/cell	893	638	447	277	204	161	134	118	95.2	80.9	42.7
1.70V/cell	860	618	433	274	202	159	133	117	94.6	80.6	42.5
1.75V/cell	831	603	424	270	201	158	132	117	93.9	80.2	42.3
1.80V/cell	787	581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

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

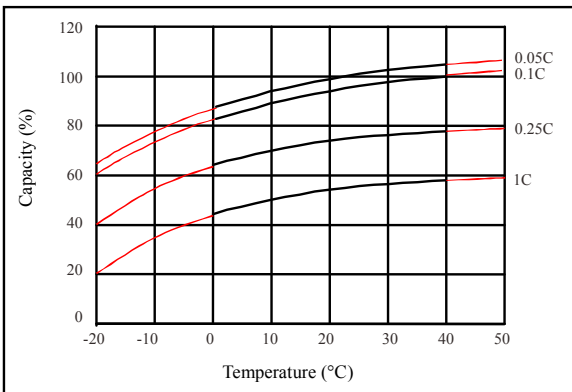
● Discharge characteristics (25°C)



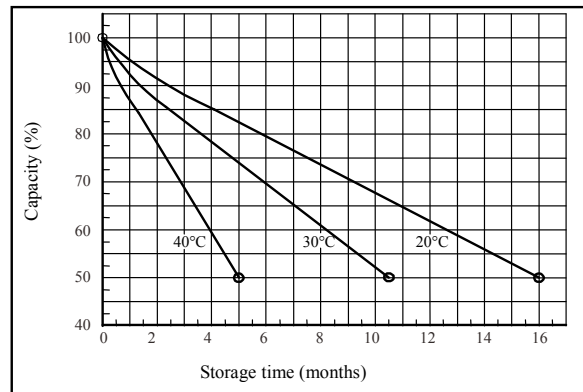
● Charging characteristics (25°C)



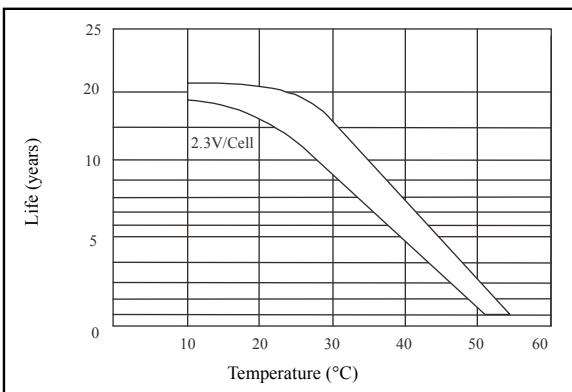
● Temperature effects on capacity



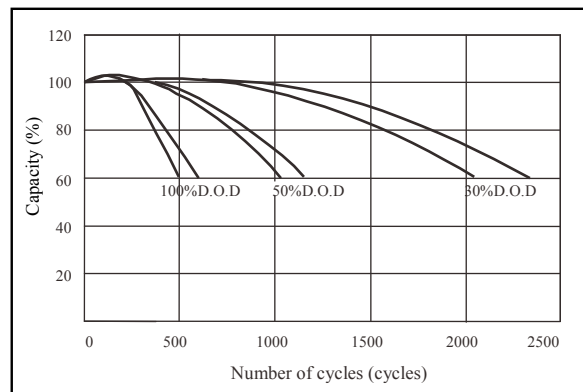
● Self-discharge characteristics



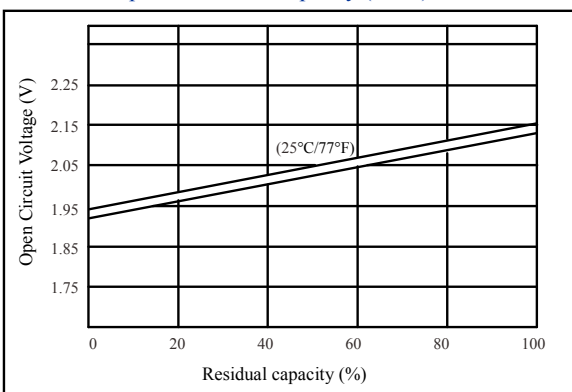
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

