

NP12-5.5Ah 12V5.5Ah

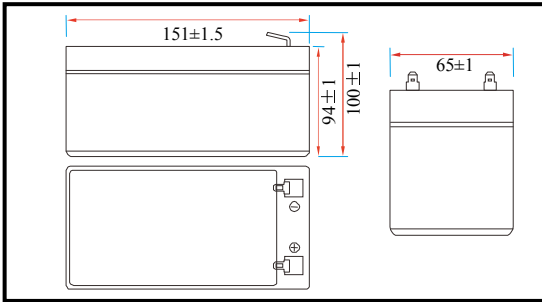
Valve Regulated Lead Acid Battery

● Specifications

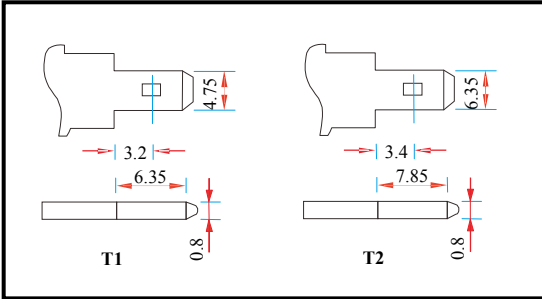
Nominal voltage	12V (6 cells per unit)	
Rated capacity (20HR)	5.5Ah/10.5V	
Dimensions	Length	151±1.5mm (5.94inch)
	Width	65±1mm (2.56inch)
	Height	94±1mm (3.70inch)
	Total height	100±1mm (3.94inch)
Approx. weight	1.85kg (4.08lbs)±4%	



● Outer dimensions (mm)



● Terminal type (mm)



● Characteristics

Capacity (25°C)	20HR (10.5V)	5.5Ah
	10HR (10.5V)	5.1Ah
	1HR (9.60V)	3.3Ah
Terminal type		T1/T2
Internal resistance (Fully charged, 25°C)		Approx. 27mΩ
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)		13.60 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		1.65A
Maximum discharge current		82.5A (5 sec.)
Design life	5 years for floating (25°C)	
	Eurobat (20°C): 3-5 years, standard commercial.	

● 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	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	21	13.3	10.4	5.86	3.6	1.97	1.37	1.13	0.96	0.52	0.28
9.90V	20.4	12.9	10.2	5.74	3.55	1.96	1.35	1.12	0.95	0.52	0.28
10.2V	19.6	12.4	9.74	5.56	3.46	1.94	1.34	1.12	0.95	0.52	0.28
10.5V	18.7	11.9	9.43	5.43	3.39	1.91	1.34	1.11	0.94	0.51	0.28
10.8V	17.7	11.2	8.96	5.23	3.28	1.86	1.3	1.07	0.91	0.5	0.27

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

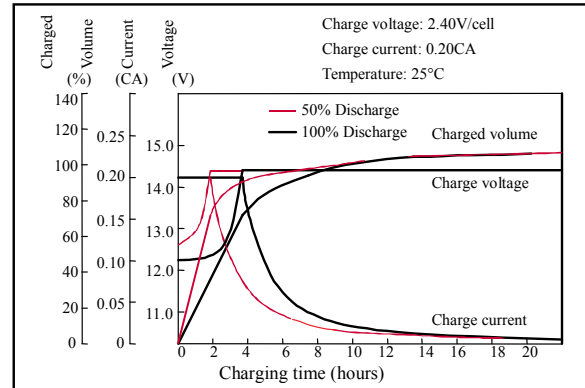
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	235	150	119	67.1	41.7	23.1	16.2	13.5	11.5	6.25	3.35
9.90V	227	146	116	65.8	41.1	22.9	16.1	13.4	11.4	6.22	3.34
10.2V	219	140	112	63.8	40.1	22.7	16	13.3	11.3	6.19	3.32
10.5V	209	134	108	62.3	39.3	22.4	15.9	13.2	11.2	6.16	3.3
10.8V	198	127	102	60	38.1	21.9	15.4	12.8	10.9	6.03	3.24

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

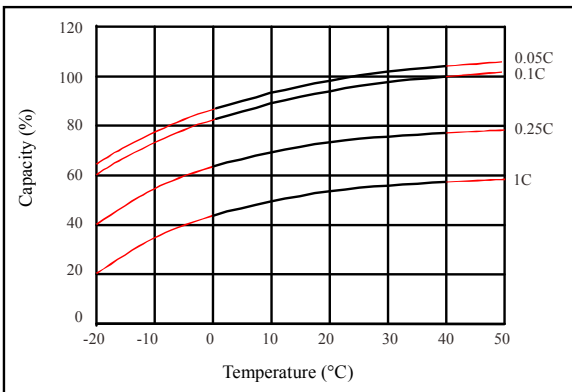
● Discharge characteristics (25°C)



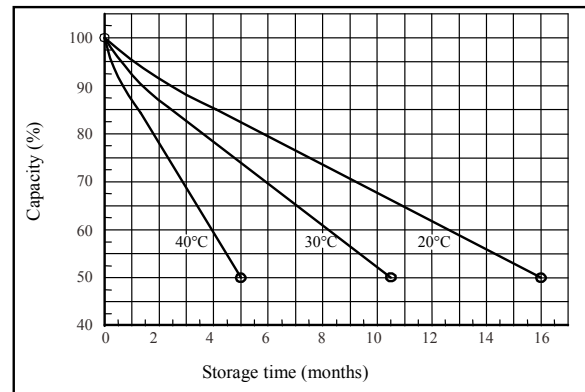
● Charging characteristics (25°C)



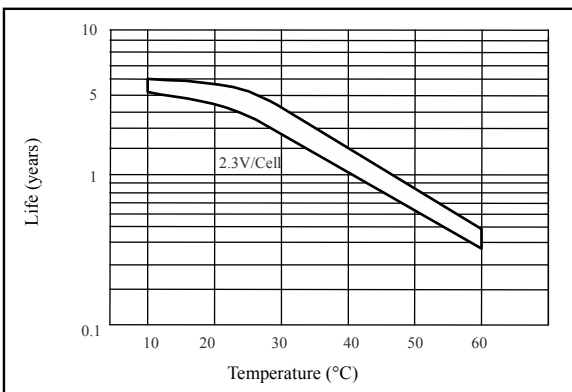
● Temperature effects on capacity



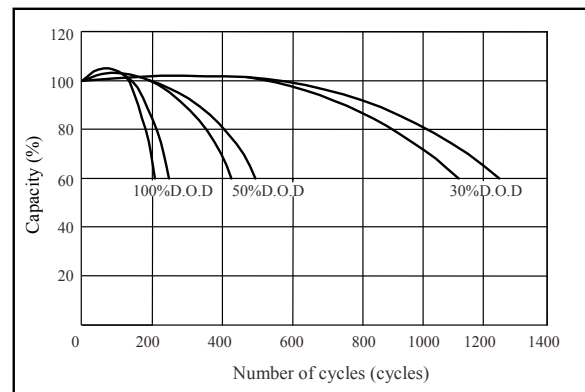
● Self-discharge characteristics



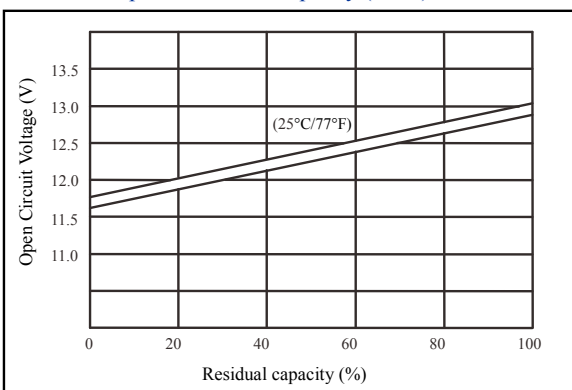
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

