

NP12-35Ah (12V35Ah)

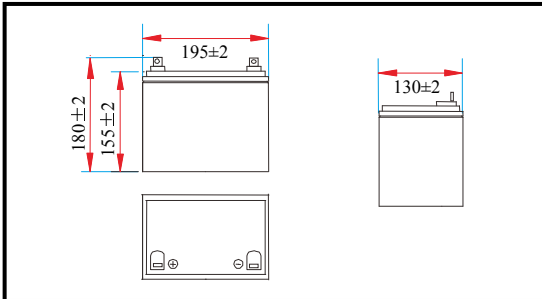
Valve Regulated Lead Acid Battery



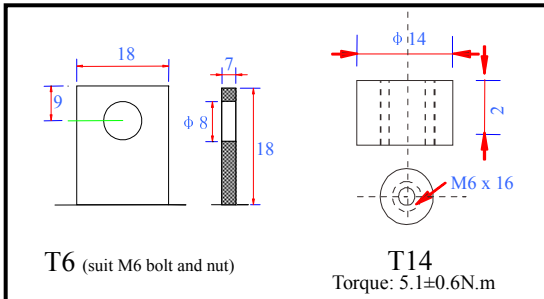
Specifications

Nominal voltage	12V (6 cells per unit)	
Rated capacity (10HR)	35Ah/10.8V	
Dimensions	Length	195±2mm (7.68inch)
	Width	130±2mm (5.12inch)
	Height	155±2mm (6.10inch)
	Total height	T14: 167±2mm (6.57inch) T6: 180±2mm (7.09inch)
Approx. weight	10.50kg (23.15lbs)±4%	

Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	10HR (10.8V)	35Ah
	3HR (10.8V)	25Ah
	1HR (10.5V)	20Ah
Terminal type		T6/T14
Internal resistance (Fully charged, 25°C)		Approx. 11mΩ
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		10.5A
Maximum discharge current		330A (5 sec.)
Design life	10 years for floating (25°C)	
	Eurobat (20°C): 6-9 years, general purpose.	

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/Lead

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	74.49	57.39	34.4	21.13	12.54	8.99	7.18	6.13	4.22	3.54	1.89
9.90V	72.31	56.05	33.67	20.82	12.43	8.94	7.14	6.10	4.20	3.53	1.89
10.2V	69.31	53.98	32.63	20.31	12.33	8.88	7.10	6.06	4.16	3.52	1.88
10.5V	66.30	52.11	31.81	19.68	12.12	8.82	7.04	6.02	4.13	3.51	1.87
10.8V	62.57	49.42	30.67	19.06	11.81	8.56	6.83	5.83	4.01	3.50	1.86

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

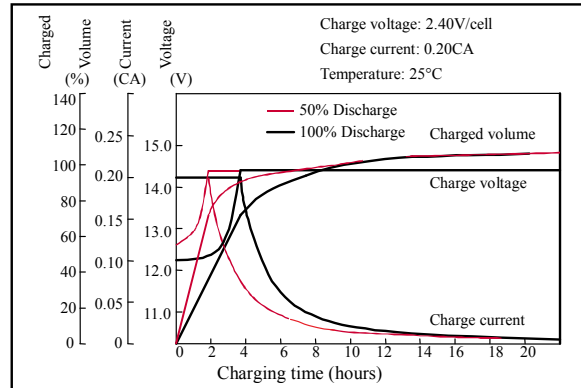
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	804.97	630.92	385.39	240.35	145.04	105.67	84.43	72.52	50.14	41.54	22.17
9.90V	781.14	615.38	378.14	237.24	144.00	105.67	84.02	72.11	49.83	41.44	22.07
10.2V	749.03	592.59	366.74	231.03	142.97	104.64	83.40	71.59	49.52	41.34	22.07
10.5V	715.88	572.91	357.42	223.78	140.90	103.60	82.78	71.17	49.11	41.13	21.86
10.8V	676.51	542.86	343.95	216.52	136.75	100.60	80.29	69.00	47.66	40.82	21.76

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

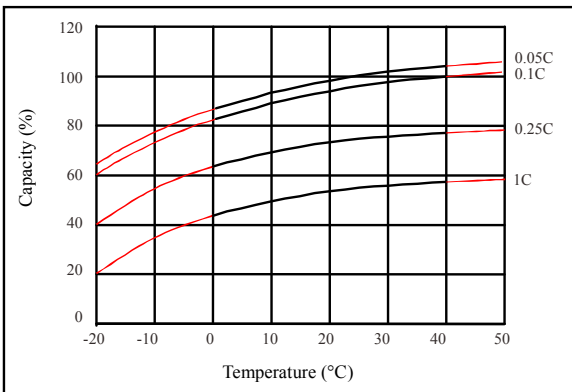
● Discharge characteristics (25°C)



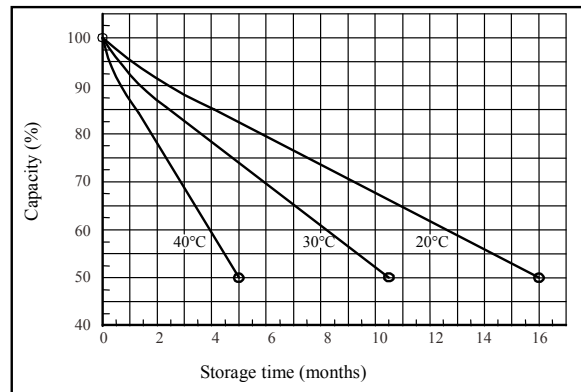
● Charging characteristics (25°C)



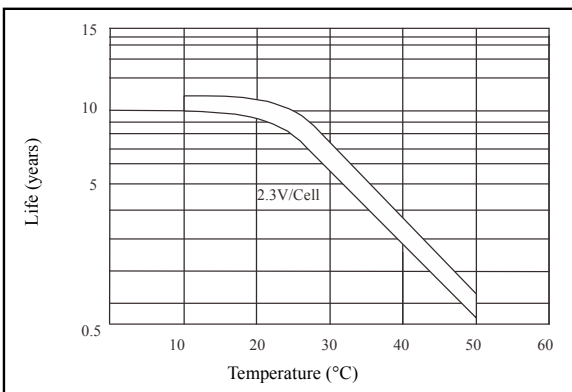
● Temperature effects on capacity



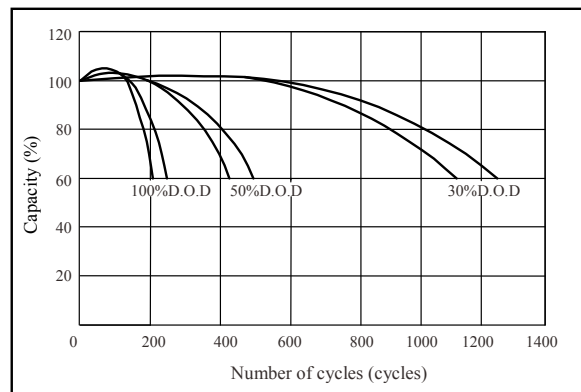
● Self-discharge characteristics



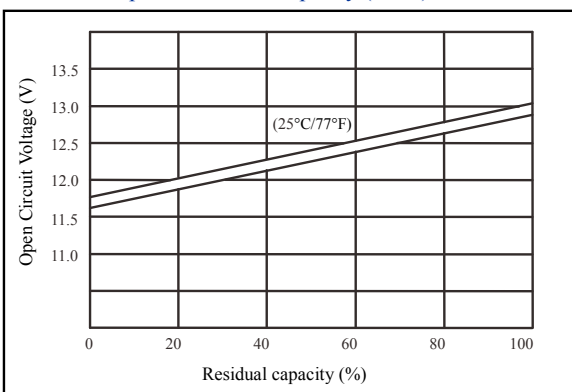
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

