

Neata[®]

+ Super energy

AGM Battery series

Datasheet : NT12-45(12V45AH)

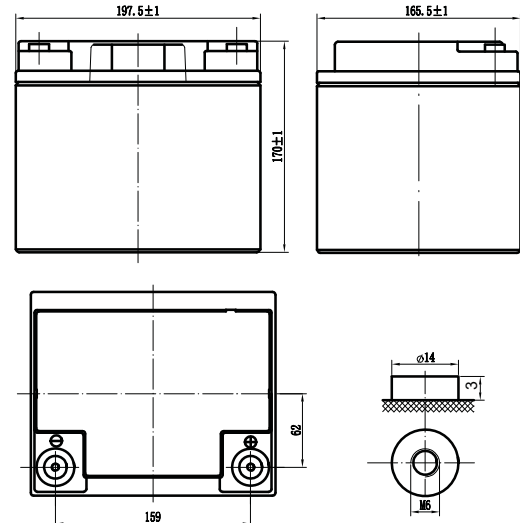
Nominal Voltage	12V
Number of cell	6
Design Life	10 years
Nominal Capacity 77°F(25°C)	
10 hour rate (4.50A, 10.5V)	45.0Ah
5 hour rate (7.38A, 10.5V)	36.9Ah
1 hour rate (28.0A, 9.6V)	28.0Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤8.0mOhms
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operating Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	450(5s)
Short Circuit Current	1050A
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	13.5A
Temperature compensation	-30mV/°C
Standby use	13.6-13.8V
Temperature compensation	-20mV/°C



Mechanical Characteristics

Length(mm / inch)	197.5 / 7.77
Width(mm / inch)	165.5 / 6.52
Height(mm / inch)	170 / 6.69
Total Height(mm / inch)	170 / 6.69
Approx. Weight(Kg / lbs)	13.2 / 29.04

* Weight deviation: ± 5%



Technical Characteristics

Discharge Constant Current (Amperes at 77°F25°C)

End Point	Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h
	1.60V	100	77.8	45.7	35.0	28.0	11.8	7.80	4.58
	1.65V	95.0	74.3	45.5	34.4	27.6	11.6	7.66	4.54
	1.70V	90.0	73.0	43.9	31.9	27.2	11.3	7.52	4.53
	1.75V	85.0	69.0	39.9	31.2	26.9	11.1	7.38	4.51
	1.80V	80.0	66.0	39.0	30.5	26.5	10.9	7.30	4.50

Discharge Constant Power (Watts at 77°F25°C)

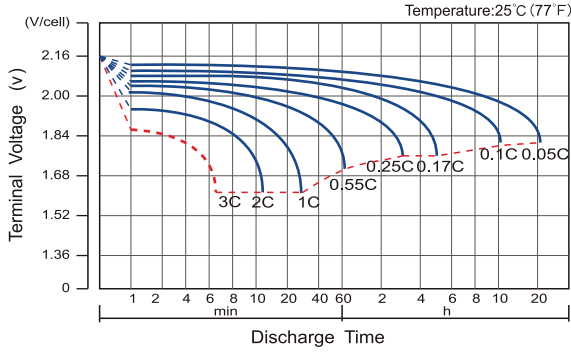
End Point	Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h
	1.60V	187	147	98.6	74.6	59.2	33.2	24.5	15.8
	1.65V	174	140	86.9	67.6	54.8	30.8	22.8	14.8
	1.70V	166	135	83.8	65.3	54.0	30.4	22.5	14.7
	1.75V	156	127	81.8	64.1	53.1	30.0	22.3	14.5
	1.80V	153	103	80.0	63.0	52.3	29.6	22.0	14.2

(Note)The above characteristics data are average values obtained within three charge/discharge cycles. All data shall be changed without notice, Neata reserves the right to explain and update the information.

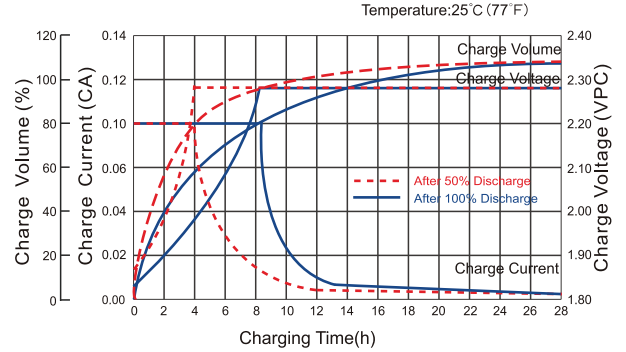
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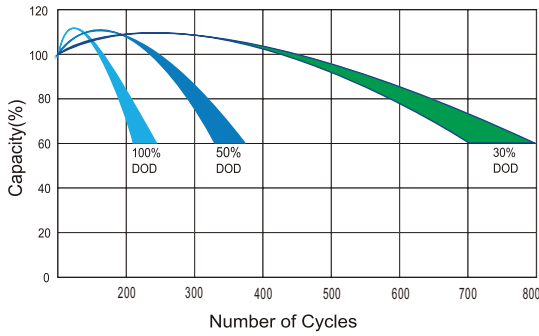
Discharge Characteristics Curve



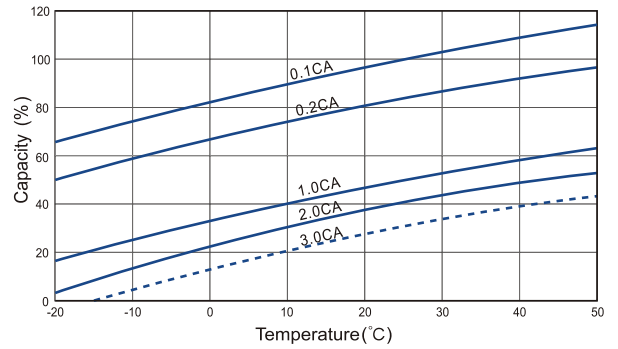
Charge Characteristic Curve For Standby Use



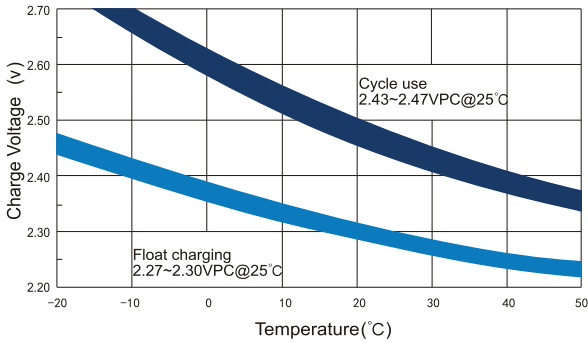
Cycle Life In Relation To Depth Of Discharge



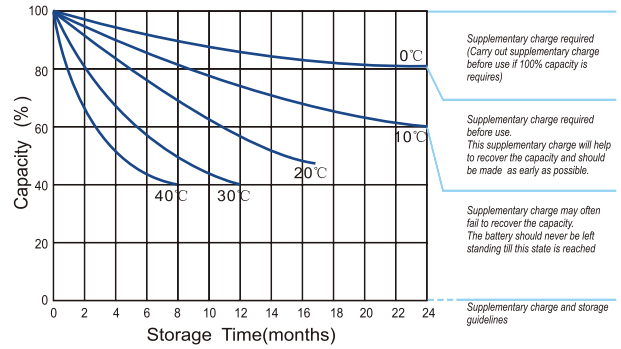
Temperature Effects On Capacity



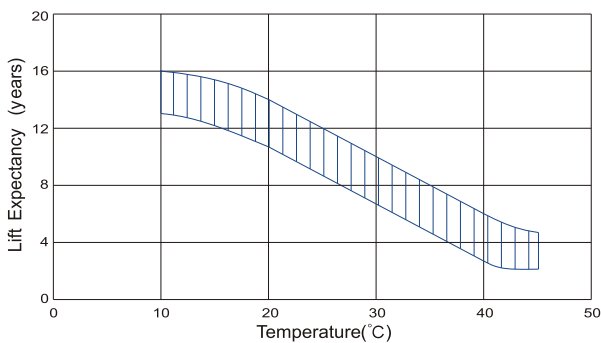
Relationship Between Charging Voltage And Temperature



Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use

