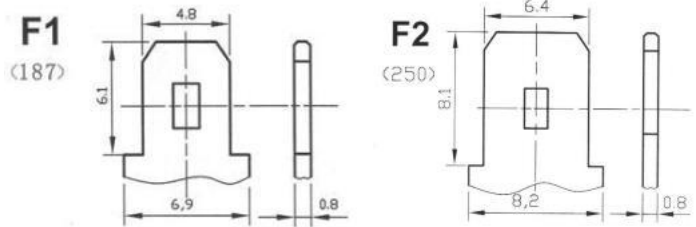


# Valve Regulated Lead-Acid Battery

Model: BT-6M12AC(6V12AH)



## Application

- ☆ Measuring equipment and instrument
- ☆ Telephone sets
- ☆ Lighting equipment
- ☆ Security systems
- ☆ UPS power supply

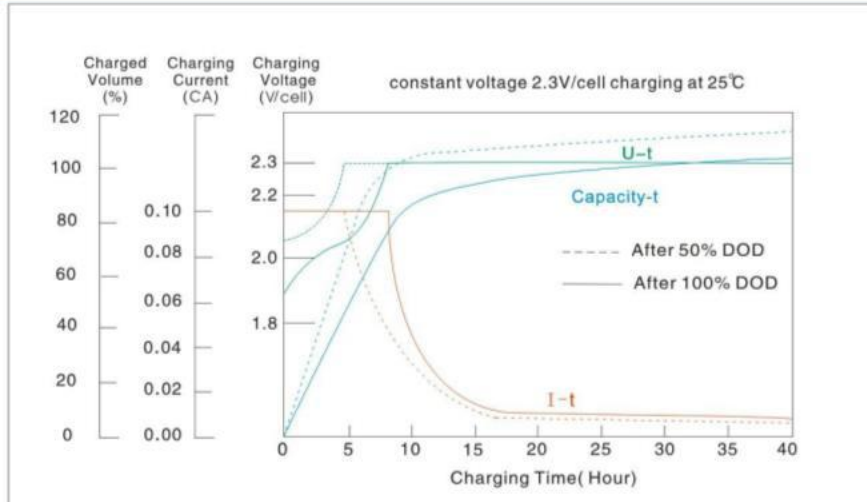
## General Features

- ☆ Designed floating charging service life: 8 years (25°C)
- ☆ Sealed and maintenance free operation
- ☆ Safety valve installation for explosion proof
- ☆ Low self-discharge characteristic
- ☆ Wide operating temperature range from 0°C-40°C
- ☆ Lead Aluminum calcium Tin alloy high energy, prevent corrosion

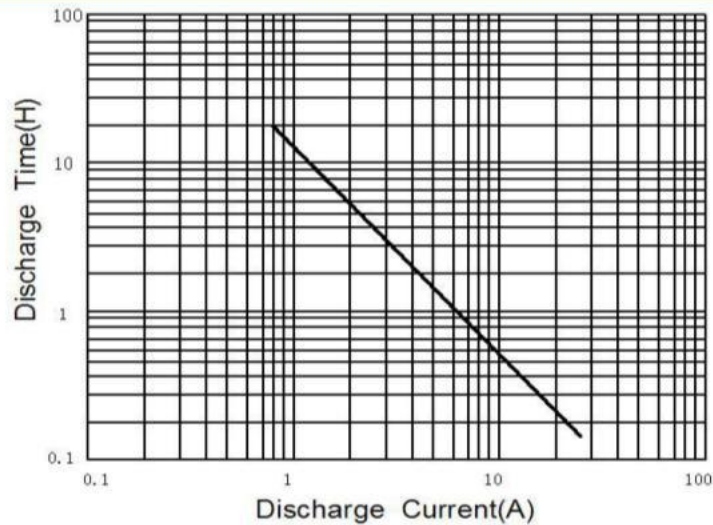
PHYSICAL SPECIFICATIONS		
<b>Nominal Voltage</b>		6V
<b>Nominal Capacity (20HR)</b>		12AH
<b>Dimensions</b>	<b>Length</b>	151±2mm
	<b>Width</b>	51±1mm
	<b>Container height</b>	94±1mm
	<b>Total Height (with terminal)</b>	99±1mm
<b>Weight±3%</b>		Approx 1.72Kg(3.79lbs)
<b>Internal Resistance(In full charge status)</b>		≈6.70mΩ
<b>Standard Terminals</b>		F1/F2(standard)

Constant – Voltage Charge	
<b>Cycle application</b>	<ol style="list-style-type: none"> <li>1. Limit initial current less than 3.0A.</li> <li>2. Charge until battery voltage (under charge) reaches 7.05V to 7.2V at 25°C (77F) .</li> <li>3. Hold at 7.05V to 7.2V until current drop to under 0.072A for at least 3 hours.</li> <li>4. Temperature compensation coefficient of charging voltage is -15mV/°C.</li> </ol>
<b>Standby service</b>	<ol style="list-style-type: none"> <li>1. Hold battery across constant voltage source of 6.8 to 6.9 volts with current limit 3.0A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status.</li> <li>2. Temperature compensation coefficient of charging voltage is -9mV/°C</li> </ol>
<p>NOTE : The battery should be charged within 6 months of storage ,Otherwise , permanent loss of capacity might occur as a result of sulfation</p>	

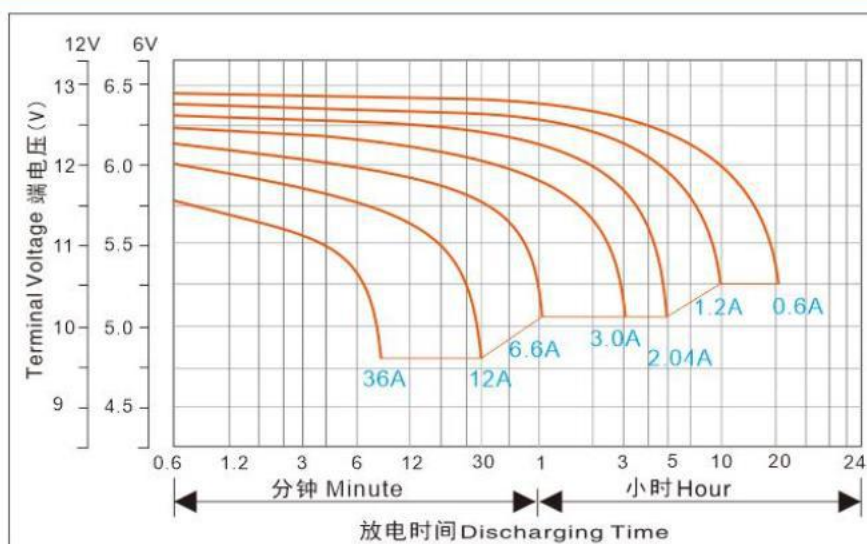
## Charge Characteristics



## Discharge Current & Discharge Duration Time (25°C/77°F)



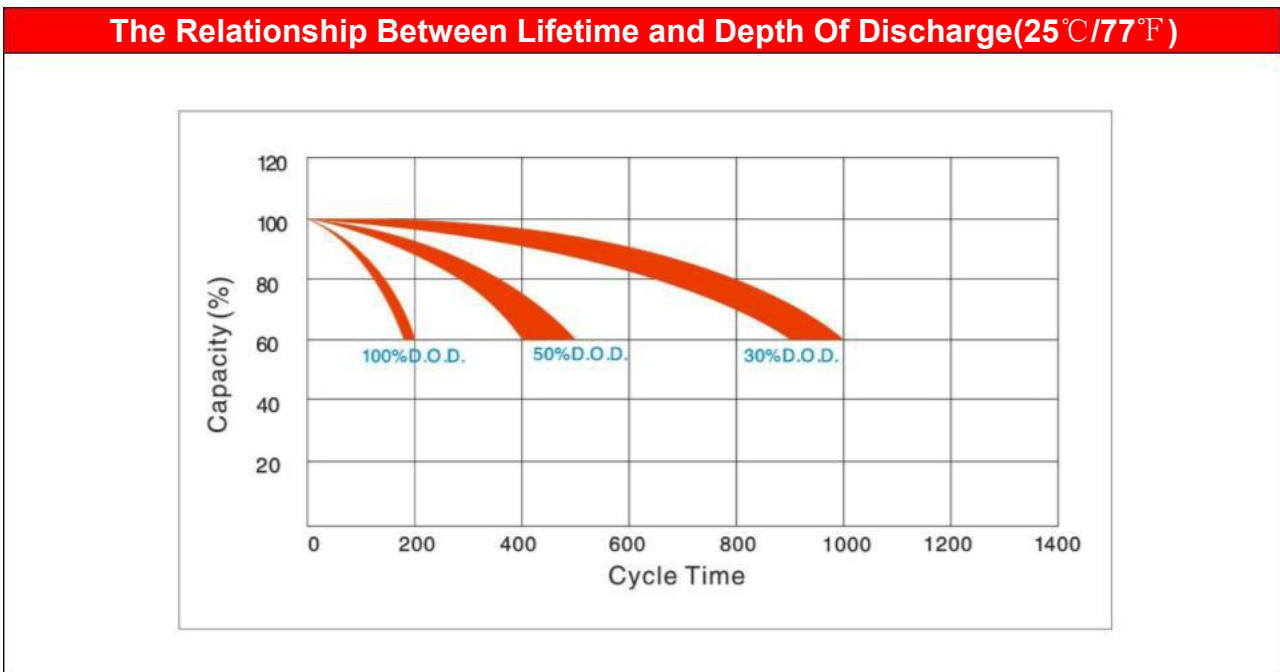
## Discharge Characteristic (25°C/77°F)



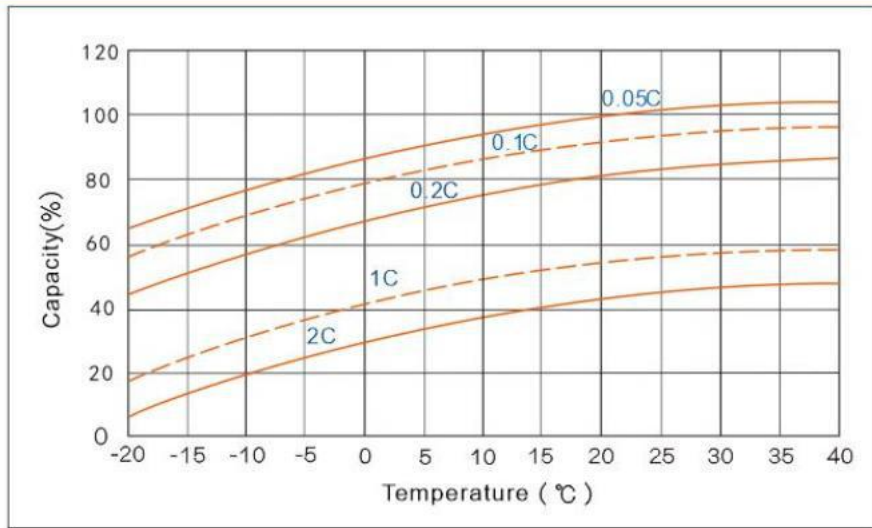
ELECTRICAL SPECIFICATIONS		
<b>Rated Capacity</b>	20 hour rate(0.60A)	12.20AH
	10 hour rate(1.20A)	11.82AH
	5 hour rate(2.04A)	10.10AH
	27 minute rate(12A)	6.00AH
	7 minute rate (36A)	4.20AH
<b>Capacity affected by Temperature (20Hour Rate)</b>	40°C(104°F)	103%
	25°C(77°F)	100%
	0°C(32°F)	86%

Constant Current Discharge Data Sheet ( Amperes at 25°C)													
End Voltage	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
<b>5.10</b>	44.4	28.9	22.6	11.5	8.38	7.20	5.73	4.26	3.22	2.06	1.38	1.16	0.612
<b>5.25</b>	44.0	28.6	22.4	11.5	8.30	7.15	5.63	4.10	3.11	2.02	1.37	1.15	0.606
<b>5.40</b>	43.5	28.3	22.2	11.3	8.22	7.10	5.52	3.94	3.00	1.98	1.35	1.14	0.600

Constant Power Discharge Data Sheet ( Watt at 25°C)													
End Voltage	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
<b>5.10</b>	242	175	141	79.70	58.10	44.21	33.91	25.51	18.21	12.00	8.45	6.84	3.68
<b>5.25</b>	232	169	137	78.05	56.80	43.51	33.41	25.15	17.80	11.87	8.39	6.74	3.63
<b>5.40</b>	220	163	133	75.80	55.35	42.79	32.92	24.79	17.49	11.73	8.30	6.63	3.58



## Capacity Curve at Different Temperature



## Storage Characteristics

