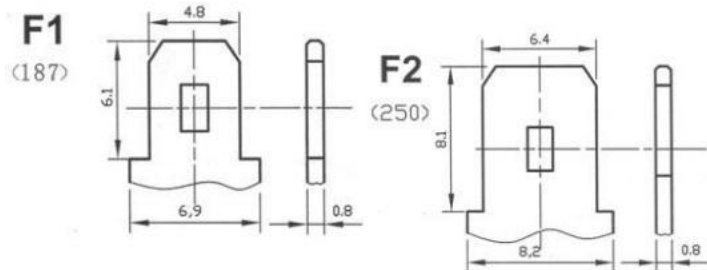


Valve Regulated Lead-Acid Battery

Model: BT-12M12AC(12V12AH)



Application

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

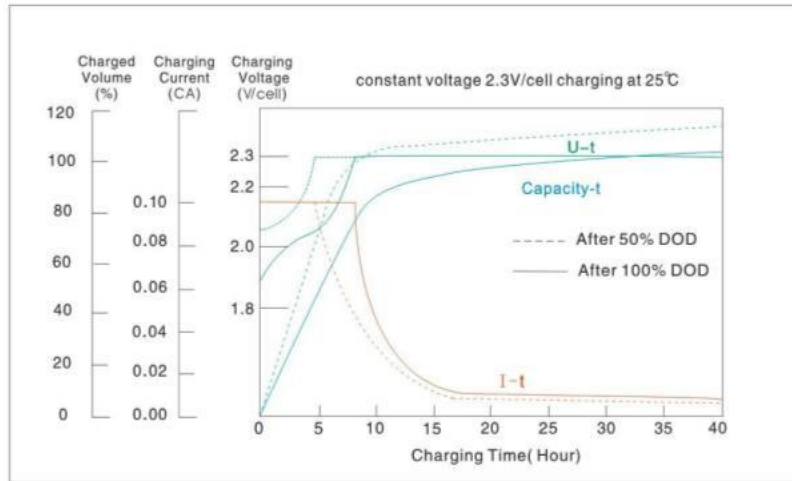
General Features

- ☆ 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

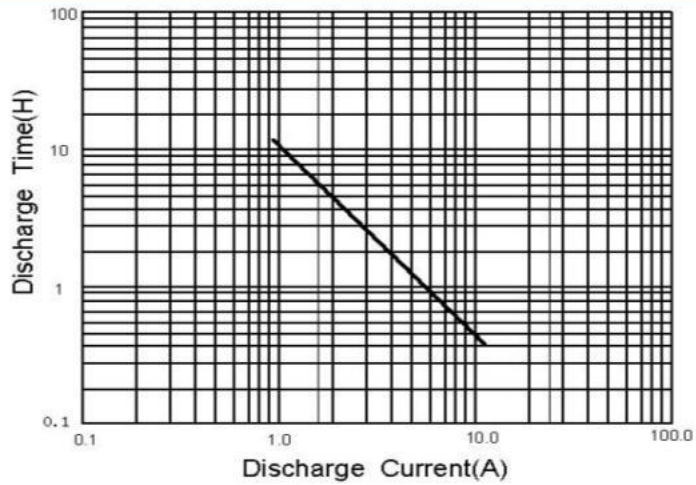
PHYSICAL SPECIFICATIONS	
Nominal Voltage	
12V	
Nominal Capacity (20HR)	
12AH	
Dimensions	Length
	151±2mm
	Width
	98±1mm
	Container height
	95±1mm
	Total Height (with terminal)
	99±1mm
Weight±3%	
Approx. 3.45Kg(7.60lbs)	
Internal Resistance(In full charge status)	
≈13.5mΩ	
Standard Terminals	
F1/F2(standard)	

Constant – Voltage Charge	
Cycle application	<ol style="list-style-type: none"> 1. Limit initial current less than 3.0A. 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C (77F) . 3. Hold at 14.1V to 14.4V until current drop to under 0.072A for at least 3 hours. 4. Temperature compensation coefficient of charging voltage is -30mV/°C.
Standby service	<ol style="list-style-type: none"> 1. Hold battery across constant voltage source of 13.6to 13.8 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. 2. Temperature compensation coefficient of charging voltage is -18mV/°C
<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>	

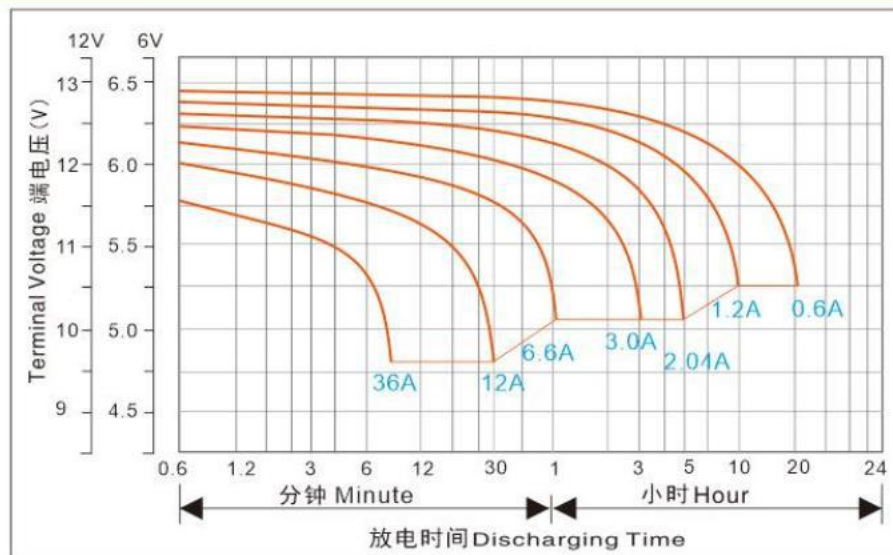
Charge Characteristics



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



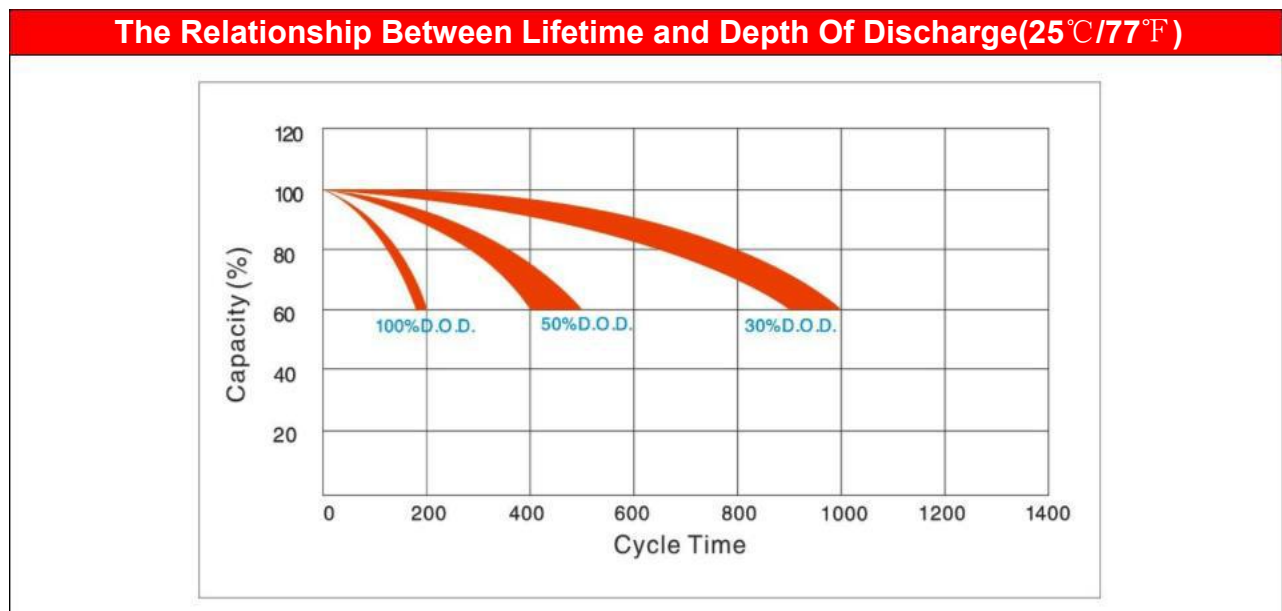
Discharge Characteristic (25°C/77°F)



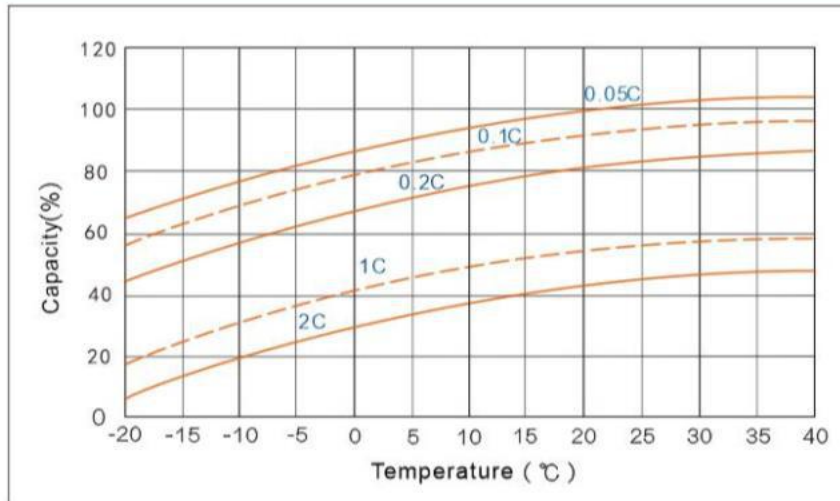
ELECTRICAL SPECIFICATIONS		
Rated Capacity	20 hour rate(0.6A)	12.01AH
	10 hour rate(1.2A)	11.76AH
	5 hour rate(2.04A)	10.00AH
	27 minute rate(12A)	6.00AH
	7 minute rate (36A)	4.20AH
Capacity affected by Temperature (20Hour Rate)	40°C(104°F)	103%
	25°C(77°F)	100%
	0°C(32°F)	86%

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
10.20	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
10.50	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
10.80	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
10.20	484	349	282	159.4	116.2	88.42	67.82	51.02	36.41	24.00	16.90	13.68	7.36
10.50	464	337	274	156.1	113.6	87.02	66.82	50.30	35.59	23.73	16.77	13.47	7.26
10.80	439	325	265	151.6	110.7	85.58	65.83	49.58	34.97	23.45	16.59	13.25	7.16



Capacity Curve at Different Temperature



Storage Characteristics

