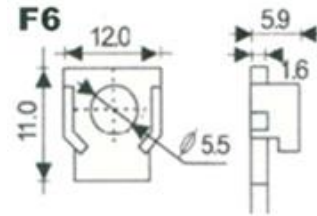


Valve Regulated Lead-Acid Battery



Model: BT-12M18AC(12V18AH)



Application

- ☆ Measuring equipment and instrument
- ☆ Telephone sets
- ☆ Lighting equipment
- ☆ Security systems

General Features

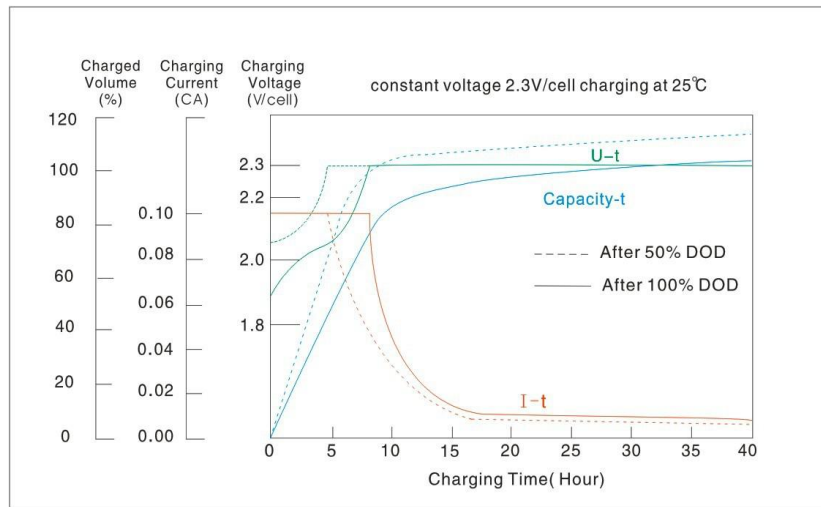
- ☆ Designed floating charging service life: 8years (25°C)
- ☆ Sealed and maintenance free operation
- ☆ Safety valve installation for explosion proof
- ☆ Low self-discharge characteristic
- ☆ Wide operating temperature range from 0°C-40°C
- ☆ Lead Aluminum calcium Tin alloy high energy, prevent corrosion

PHYSICAL SPECIFICATIONS		
Nominal Voltage	12V	
Nominal Capacity (20HR)	18AH	
Dimensions	Length	180±2mm
	Width	77±1mm
	Container height	167±2mm
	Total Height (with terminal)	167±2mm
Weight±3%	Approx 5.15Kg(11.35lbs)	
Internal Resistance(In full charge status)	≈15.5mΩ	
Standard Terminals	F6 (standard)	

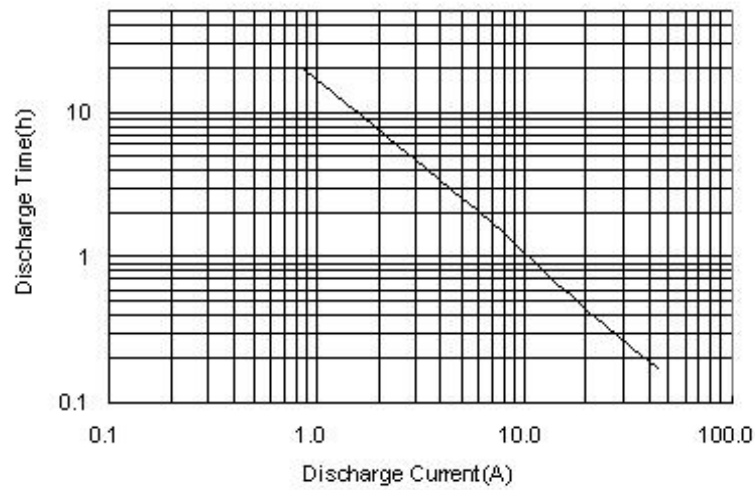
Constant – Voltage Charge	
Cycle application	<ol style="list-style-type: none"> 1. Limit initial current less than 4.50A. 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C (77F) . 3. Hold at 14.1V to 14.4V until current drop to under 0.108A for at least 3 hours. 4. Temperature 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 4.50A 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
NOTE : The battery should be charged within 6 months of storage ,Otherwise , permanent loss of capacity might occur	

as a result of sulfation

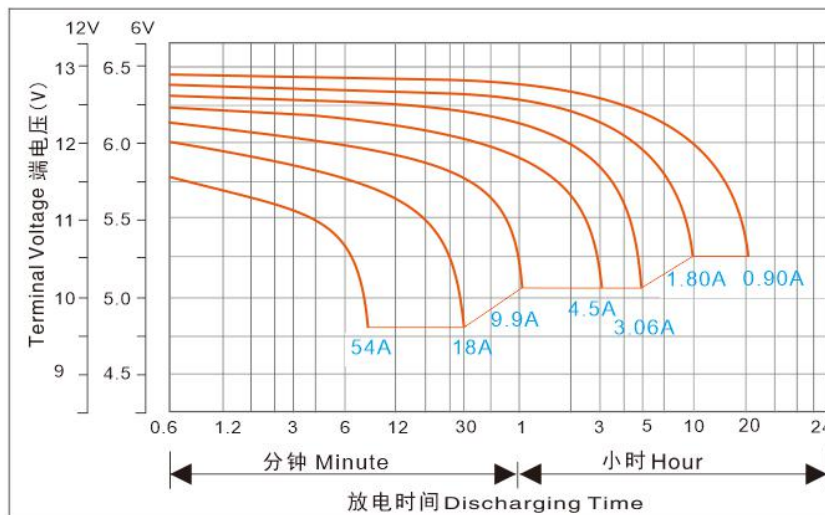
Charge Characteristics



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



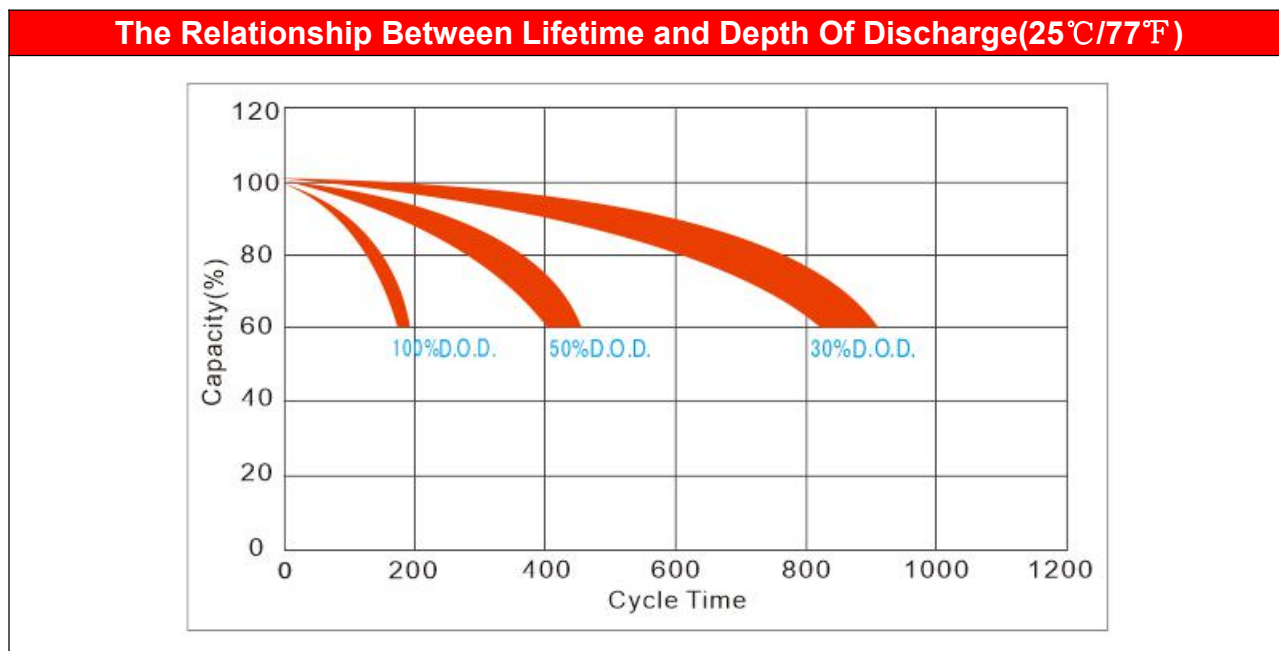
Discharge Characteristic (25°C/77°F)



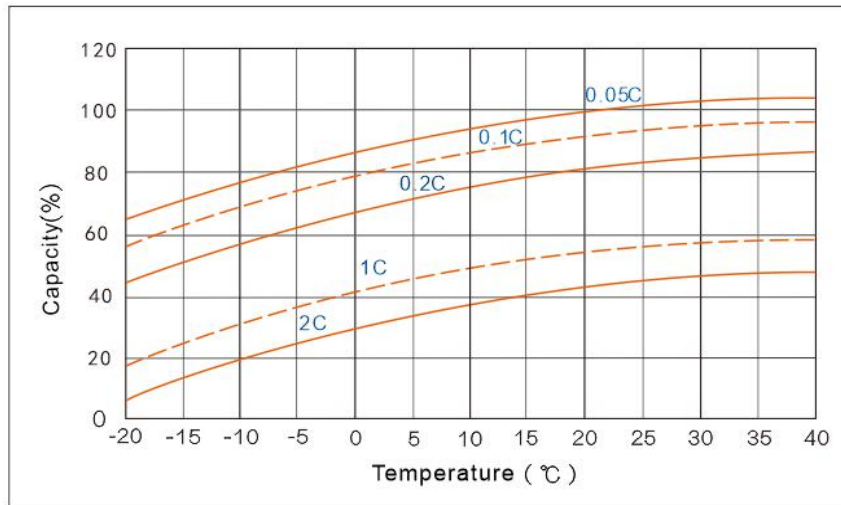
ELECTRICAL SPECIFICATIONS		
Rated Capacity	20 hour rate(0.9A)	18.02AH
	10 hour rate(1.8A)	16.95AH
	5 hour rate(3.06A)	14.85AH
	27 minute rate(18A)	9.00AH
	7 minute rate (54A)	6.48AH
Capacity affected by Temperature (20Hour Rate)	40°C(104°F)	103%
	25°C(77°F)	100%
	0°C(32°F)	86%

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	66.6	42.3	33.4	17.4	12.6	10.8	8.60	6.4	4.83	3.08	2.06	1.72	0.921
10.50	65.9	41.9	33.1	17.2	12.4	10.7	8.43	6.15	4.67	3.03	2.04	1.70	0.911
10.80	65.2	40.5	32.3	17.0	12.3	10.7	8.31	5.91	4.51	2.97	2.02	1.68	0.900

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	726	523	423	239	174.3	132.6	101.7	76.53	54.62	36.00	25.35	20.52	11.05
10.50	695	506	411	234	170.3	130.5	100.2	75.45	53.38	35.59	25.15	20.21	10.89
10.80	659	487	398	227	166.0	128.4	98.74	74.37	52.46	35.18	24.89	19.87	10.74



Capacity Curve at Different Temperature



Storage Characteristics

