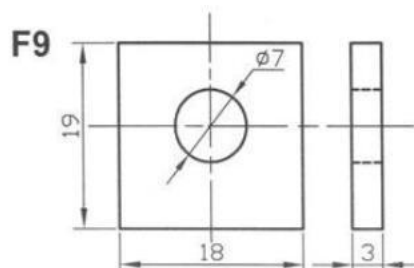


AGM Deep Cycle Battery

Model: BT-40-12 (12V40AH)



Application

- ☆ UPS power supply
- ☆ Telecom Equipment
- ☆ Power station
- ☆ Solar/wind energy storage system

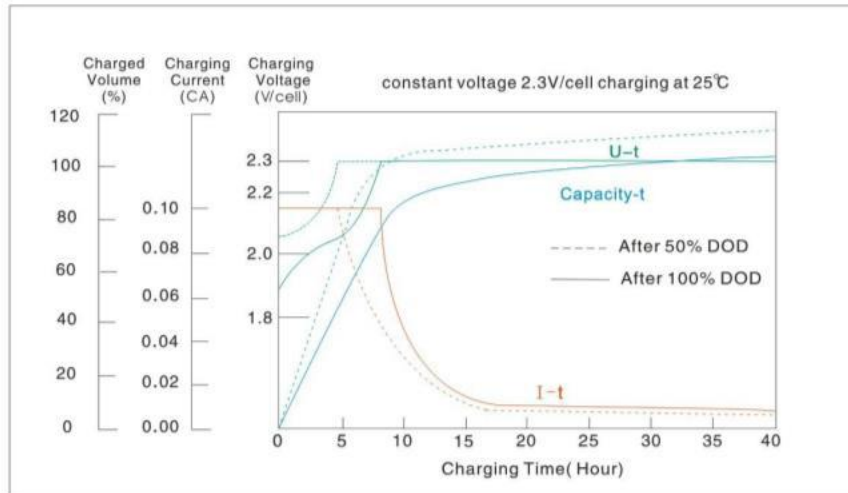
General Features

- ☆ Thick plates and high-density active material
- ☆ High power density
- ☆ Longer life in deep cycle applications
- ☆ Excellent recovery from deep discharge
- ☆ Wide operating temperature range from -10°C-40°C

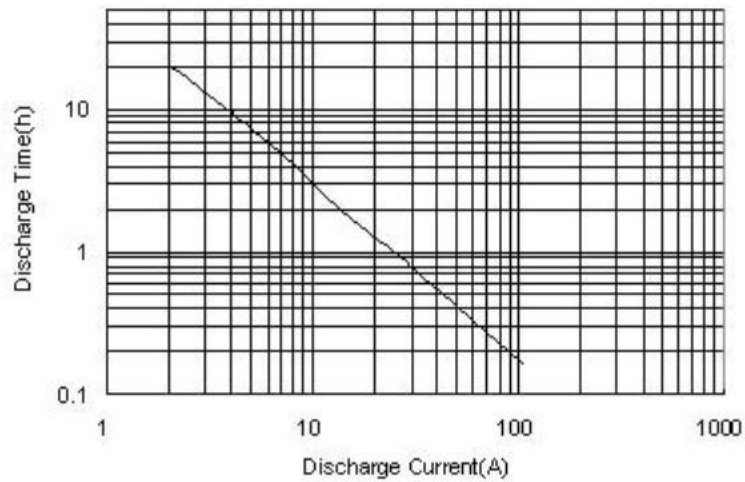
PHYSICAL SPECIFICATIONS		
Nominal Voltage		12V
Nominal Capacity (10HR)		40AH
Dimensions	Length	197±2mm
	Width	166±2mm
	Container height	170±2mm
	Total Height (with terminal)	170±2mm
Weight±3%		Approx 11.7Kg(25.79lbs)
Internal Resistance(In full charge status)		≈8.5mΩ
Standard Terminals		F9 (standard)

Constant – Voltage Charge	
Cycle application	<ol style="list-style-type: none"> 1. Limit initial current less than 10A. 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 0.24A 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 10A 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>	

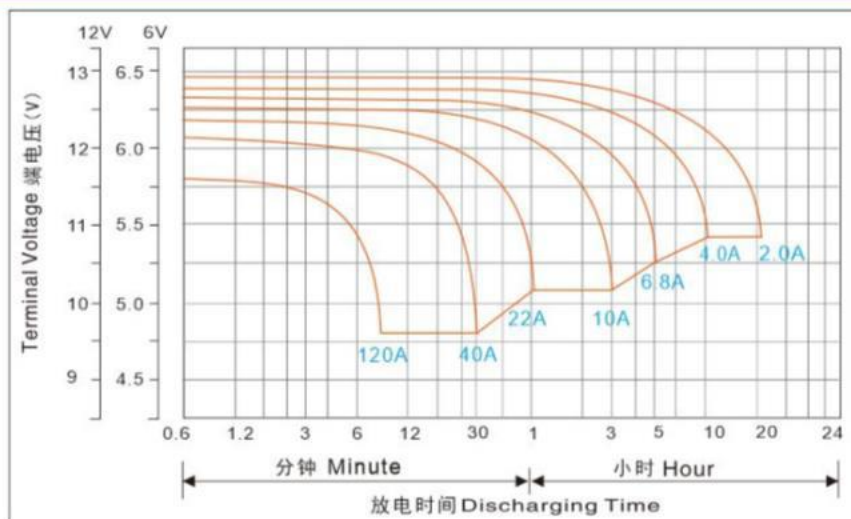
Charge Characteristics



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



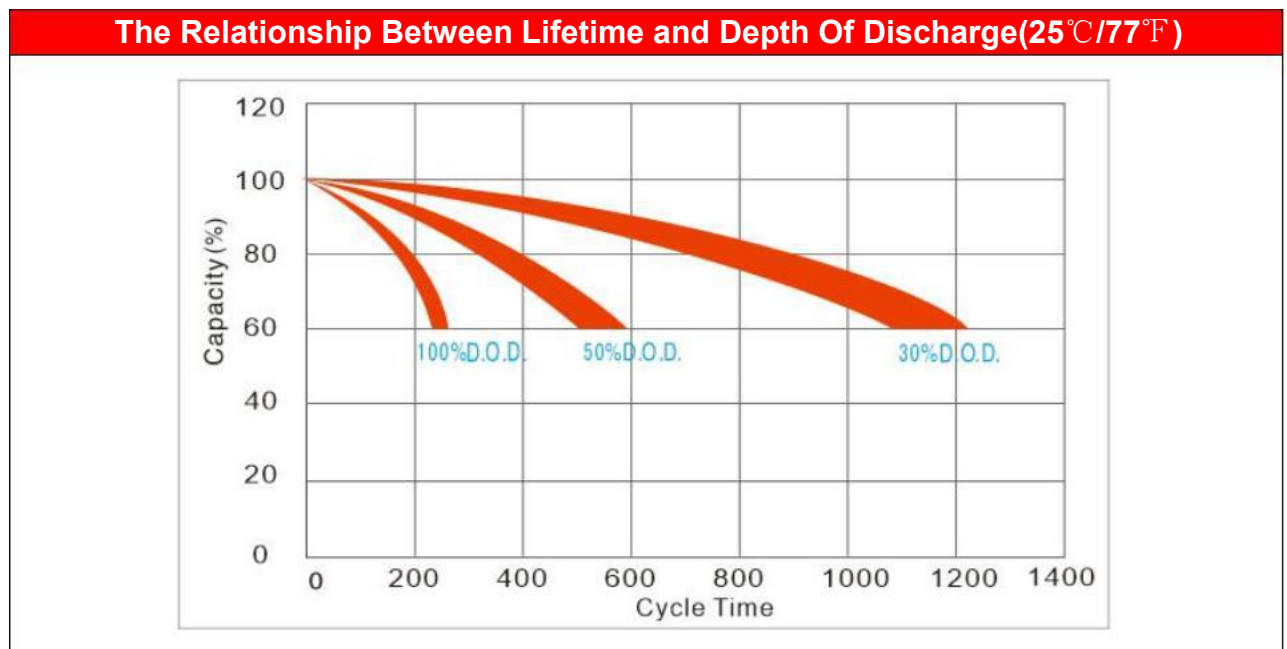
Discharge Characteristic (25°C/77°F)



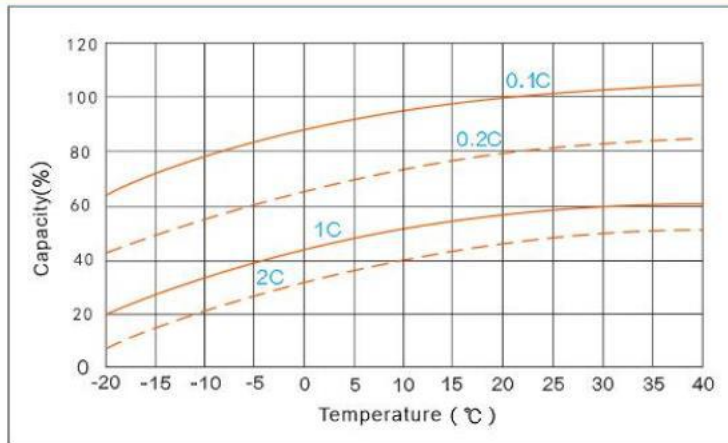
ELECTRICAL SPECIFICATIONS		
Rated Capacity	20 hour rate(2.0A)	42.1AH
	10 hour rate(4.0A)	40.0AH
	5 hour rate(6.8A)	34.0AH
	3 hour rate(10A)	30.0AH
	1 hour rate (22A)	22.0AH
Capacity affected by Temperature (10Hour Rate)	40°C(104°F)	103%
	25°C(77°F)	100%
	0°C(32°F)	86%

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	123.4	93.81	70.67	37.55	34.77	24.43	19.29	16.16	10.12	7.04	5.00	4.15	2.21
10.50	109.0	85.99	66.14	36.00	33.23	23.45	18.54	15.56	9.79	6.72	4.73	4.10	2.17
10.80	101.6	78.18	61.82	34.77	31.68	22.48	17.78	14.97	9.45	6.43	4.50	3.98	2.11

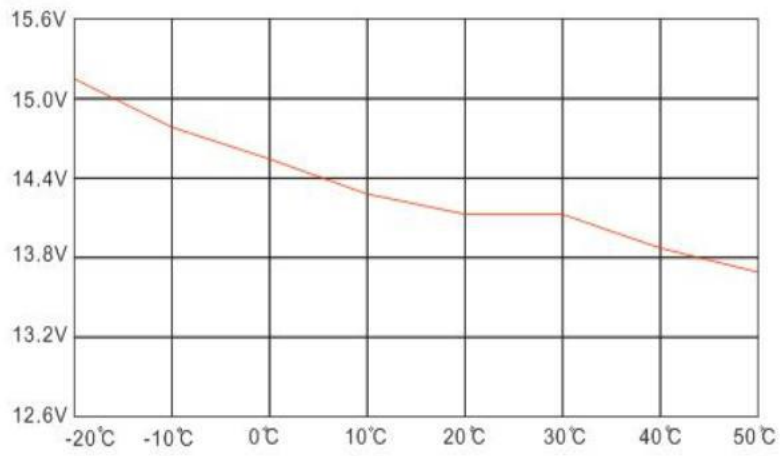
Constant Power Discharge Data Sheet (Watt at 25°C)													
End Voltage	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
10.20	1223	1036	752	468	352	305.5	223.2	167.7	125.5	80.65	59.76	50.82	26.62
10.50	1177	879	675	458	344	301.4	219.1	162.5	121.4	78.18	59.04	49.27	25.80
10.80	1094	821	645	447	332	287.0	209.8	156.4	117.3	75.40	58.22	46.91	25.21



Capacity Curve at Different Temperature



Charge Voltage VS Ambient Temperature Curve



Storage Characteristics

