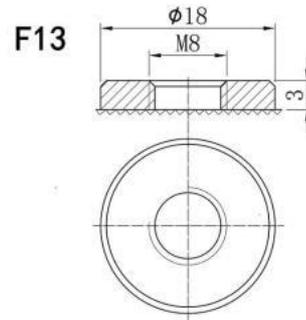


AGM DEEP CYCLE BATTERY



Model: BT-90-12 (12V90AH)



Application

- ☆ Solar system
- ☆ Wind system

General Features

- ☆ Thick plates and high-density active material
- ☆ High power density
- ☆ Longer life in deep cycle applications
- ☆ Excellent recovery from deep discharge

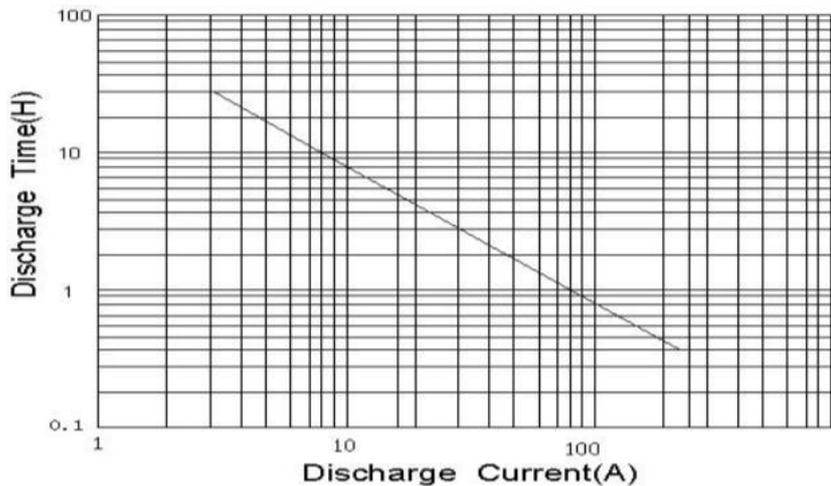
PHYSICAL SPECIFICATIONS		
Nominal Voltage		12V
Nominal Capacity (10HR)		90AH
Dimensions	Length	331±3mm
	Width	173±2mm
	Container height	216±2mm
	Total Height (with terminal)	222±2mm
Weight±3%		Approx 26.2Kg (57.64lbs)
Internal Resistance(In full charge status)		≈4.46mΩ
Standard Terminals		F13(standard)

ELECTRICAL SPECIFICATIONS		
Rated Capacity	10 hour rate(9A)	90AH
	20 hour rate(4.5A)	92.5AH
	120 hour rate(0.75A)	98.8AH
	240 hour rate(0.38A)	100AH
Capacity affected by Temperature (10Hour Rate)	40°C(104°F)	103%
	25°C(77°F)	100%
	0°C(32°F)	86%

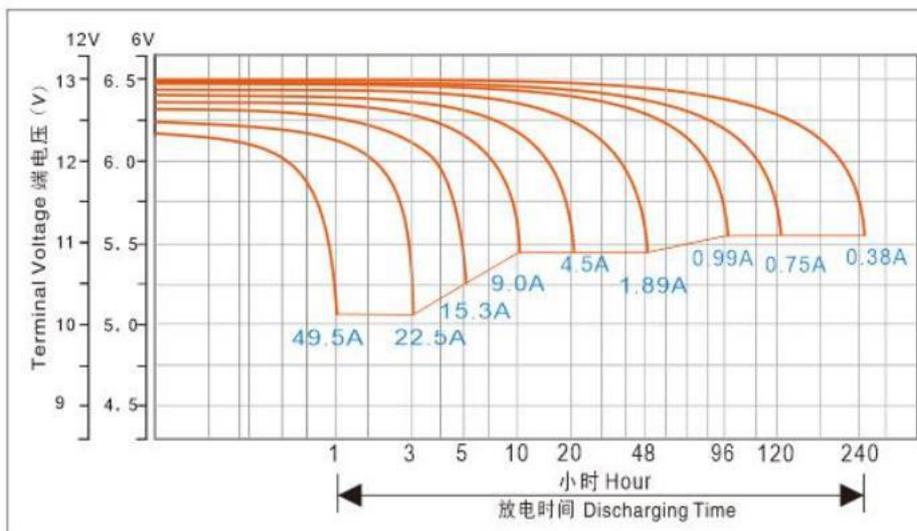
Constant – Voltage Charge

Cycle application	<ol style="list-style-type: none"> 1. Limit initial current less than 22.5A. 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C (77°F) . 3. Hold at 14.1V to 14.4V until current drop to under 0.54A 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 22.5A 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>	

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



Discharge Characteristic (25°C/77°F)



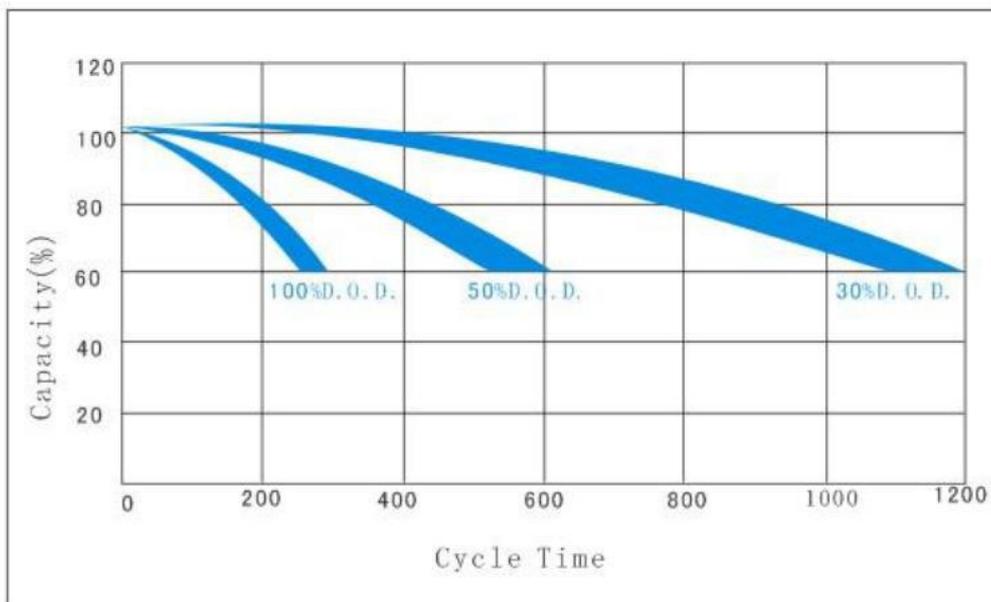
Constant Current Discharge Data Sheet (Amperes at 25°C)

End Voltage	Hour (H)									
	1	2	4	8	10	20	48	96	120	240
10.20	52.72	32.63	20.04	11.09	9.181	4.727	2.159	1.132	0.941	0.482
10.50	50.00	30.73	19.13	11.00	9.135	4.681	2.150	1.123	0.932	0.477
10.80	47.72	28.89	18.18	10.91	9.090	4.636	2.123	1.114	0.923	0.473
11.10	44.22	27.04	17.23	10.64	8.954	4.590	2.091	1.109	0.909	0.468
11.40	41.22	25.16	16.24	10.32	8.817	4.500	2.059	1.104	0.895	0.464

Constant Power Discharge Data Sheet (Watt at 25°C)

End Voltage	Hour (H)									
	1	2	4	8	10	20	48	96	120	240
10.20	548.0	339.2	208.3	115.3	95.42	49.13	22.44	11.76	9.779	5.007
10.50	519.6	319.4	198.8	114.3	94.95	48.66	22.34	11.67	9.684	4.960
10.80	496.0	300.3	189.0	113.4	94.48	48.18	22.06	11.57	9.590	4.913
11.10	459.6	281.1	179.1	110.5	93.06	47.71	21.73	11.53	9.448	4.866
11.40	428.5	261.5	168.8	107.2	91.65	46.77	21.40	11.48	9.306	4.818

The Relationship Between Lifetime and Depth Of Discharge(25°C/77°F)



Capacity Curve at Different Temperature

