

VRLA AGM Battery

12V9AH [36W/cell/15min]



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

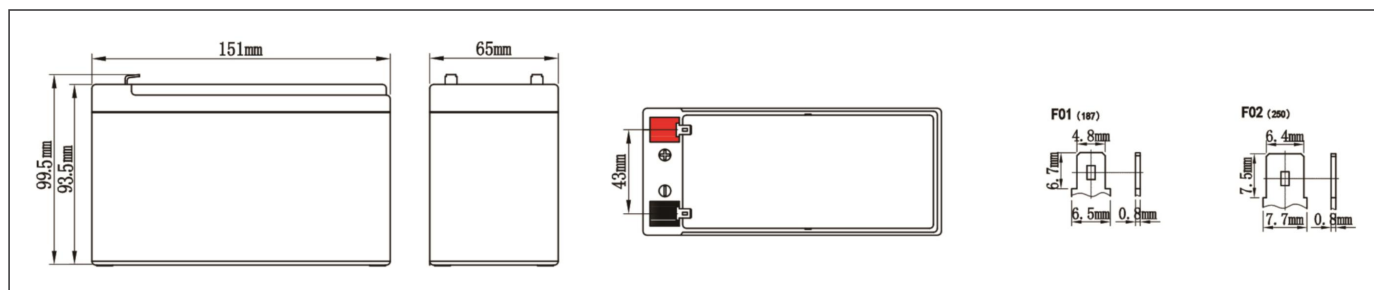
Application

- DC power supply
- Medical equipments
- UPS/EPS power supply
- Emergency lighting systems
- Alarm and security systems

Physical Specifications

Nominal Voltage	Nominal Capacity (20HR)	Dimension				Weight ±2%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	9.0AH	151±2mm	65±2mm	93.5±2mm	99.5±2mm	Approx2.48kg (5.67lbs)	≈19 mΩ	F01/F02 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity		Cycle Application	
20 hour rate (0.45A)	9.00AH	1. Limit initial current less than2.25A.	
10 hour rate (0.90A)	8.30AH	2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).	
5 hour rate (1.53A)	7.55AH	3. Hold at 14.1V to 14.4V until current drop to under 0.054A for at least 3 hours.	
27 minute rate(9.0A)	4.50AH	4. Temperature compensation coefficient of charging voltage is -30mV/°C.	
7 minute rate (27.0A)	3.60AH		
Capacity affected by Temperature		Standby Service	
40°C(104°F)	103%	1. Hold battery across constant voltage source of 13.6to 13.8 volts with current limit2.25A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status.	
25°C(77°F)	100%	2. Temperature compensation coefficient of charging voltage is -18mV/°C.	
0°C(32°F)	86%		

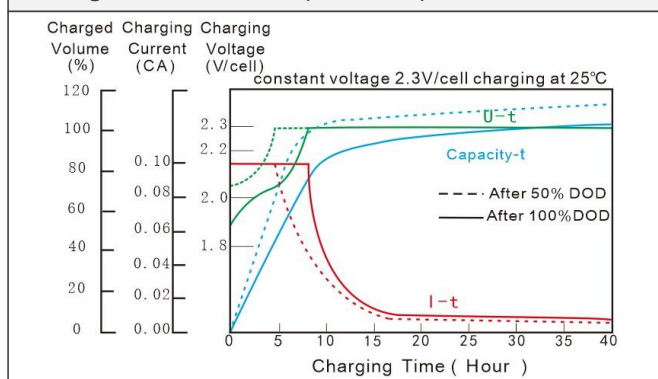
NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

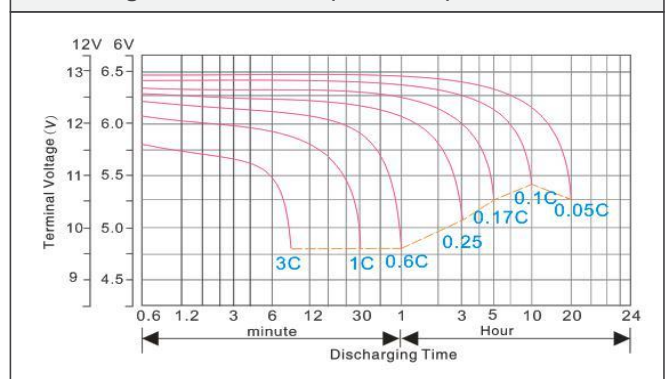
End Voltage (V)	Minute (M)				Hour (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A												
9.6V	23.9	18.7	9.61	6.74	5.67	4.53	3.37	2.54	1.63	1.08	0.870	0.459
9.9V	22.8	17.9	9.16	6.51	5.54	4.42	3.29	2.48	1.59	1.06	0.862	0.455
10.2V	21.7	17.0	8.72	6.29	5.40	4.31	3.21	2.42	1.55	1.04	0.853	0.453
10.5V	21.5	16.8	8.59	6.22	5.37	4.23	3.08	2.34	1.51	1.03	0.844	0.450
10.8V	21.3	16.7	8.51	6.15	5.32	4.14	2.96	2.25	1.49	1.02	0.830	0.447
Constant Power Discharge Data Sheet (@25°C) Unit: W												
9.6V	288	233	132	93.2	69.5	53.3	40.1	28.6	18.9	13.2	10.4	5.62
9.9V	274	222	125	90.0	67.8	52.0	39.1	27.9	18.4	12.9	10.3	5.57
10.2V	261	211	119	87.0	66.2	50.8	38.2	27.3	18.0	12.7	10.2	5.51
10.5V	252	205	117	85.0	65.1	50.0	37.6	26.6	17.8	12.6	10.1	5.43
10.8V	243	198	114	82.8	64.0	49.3	37.1	26.2	17.6	12.4	9.91	5.36

Performance Characteristics

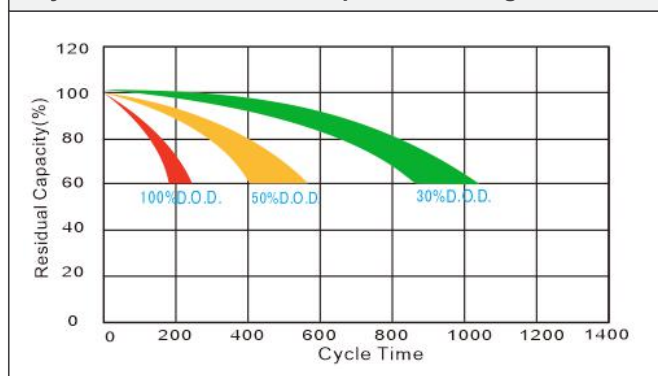
Charge Characteristics (25°C/77°F)



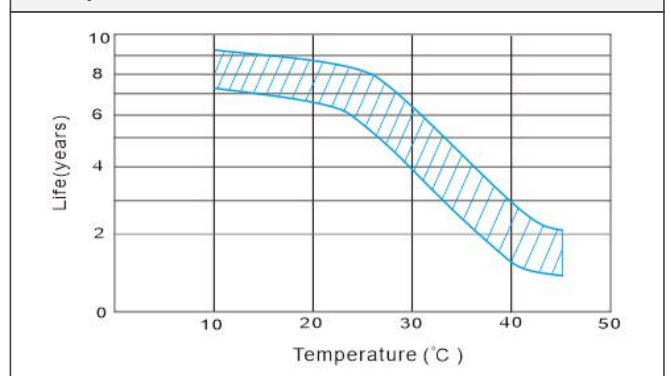
Discharge Characteristic (25°C/77°F)



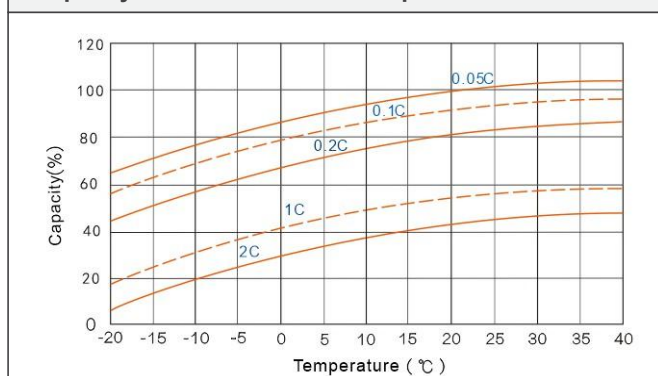
Cycle Life in Relation to Depth of Discharge



Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics

