



Power your life
ROCKET
Original



VRLA AGM Battery

ESR12-28[12V28Ah]



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

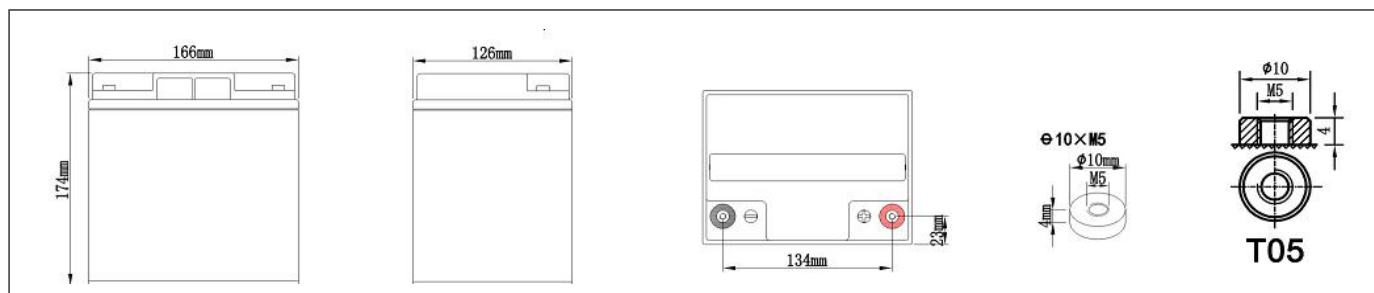
Application

- 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	28AH	166±2mm	126±2mm	174±2mm	174±2mm	Approx8.1kg (17.86lbs)	≈14.5mΩ	T05 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity	
20 hour rate (1.40A)	28.40AH
10 hour rate (2.80A)	26.70AH
5 hour rate (4.76A)	24.00AH
27 minute rate (28A)	12.60AH
7 minute rate (84A)	9.80AH
Capacity affected by Temperature	
40°C(104°F)	103%
25°C(77°F)	100%
0°C(32°F)	86%

Cycle Application

1. Limit initial current less than 8.4A.
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 0.168A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.

Standby Service

1. Hold battery across constant voltage source of 13.6to 13.8 volts with current limit 8.4A 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.

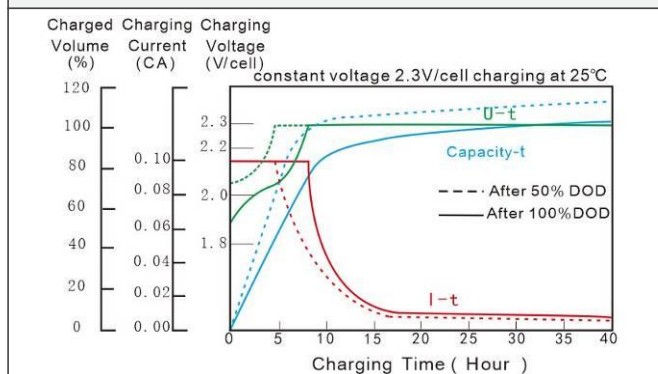
NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

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	74.6	58.4	29.9	21.1	17.8	14.1	10.5	7.91	5.14	3.36	2.79	1.48
9.9V	70.7	55.6	28.5	20.3	17.3	13.8	10.2	7.71	5.01	3.29	2.75	1.46
10.2V	67.9	53.0	27.2	19.6	16.8	13.4	9.9	7.53	4.89	3.22	2.73	1.45
10.5V	66.9	52.6	26.9	19.4	16.7	13.2	9.6	7.29	4.81	3.20	2.72	1.42
10.8V	66.0	52.0	26.6	19.1	16.6	12.9	9.2	7.04	4.70	3.16	2.67	1.41
Constant Power Discharge Data Sheet (@25°C) Unit: W												
9.6V	714	579	327	231	173	132	100	71	46.9	32.7	26.0	14.0
9.9V	679	551	311	223	168	129	97	69	45.4	32.0	25.6	13.9
10.2V	648	525	297	216	164	126	95	68	44.7	31.3	25.4	13.7
10.5V	626	510	290	211	162	124	93	66	44.1	31.2	25.1	13.5
10.8V	603	493	282	206	159	122	92	65	43.3	30.8	24.6	13.3

Performance Characteristics

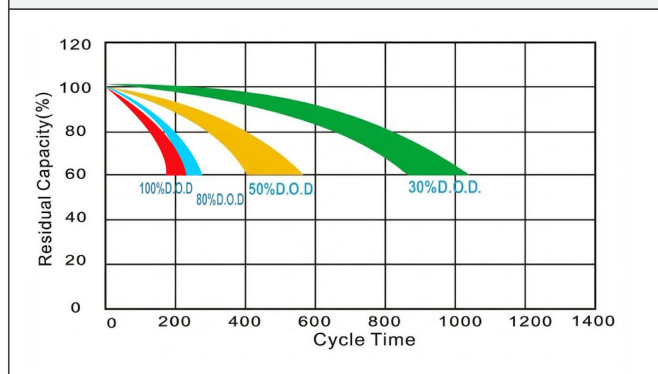
Charge Characteristics (25°C/77°F)



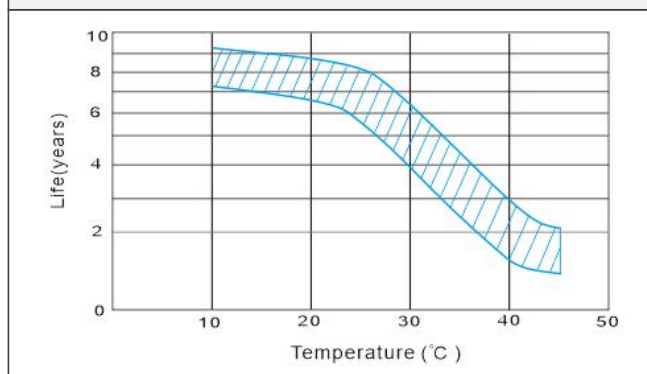
Discharge Characteristic (25°C/77°F)



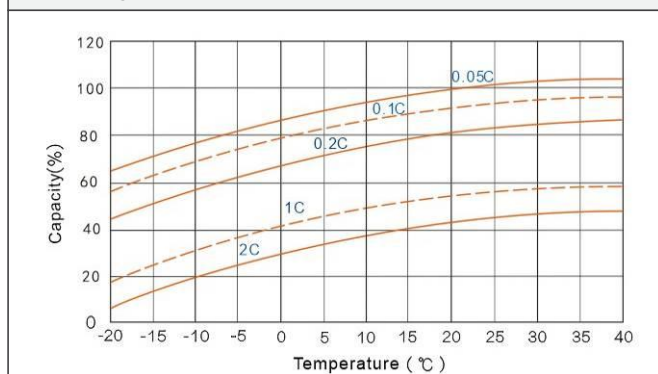
Cycle Life in Relation to Depth of Discharge



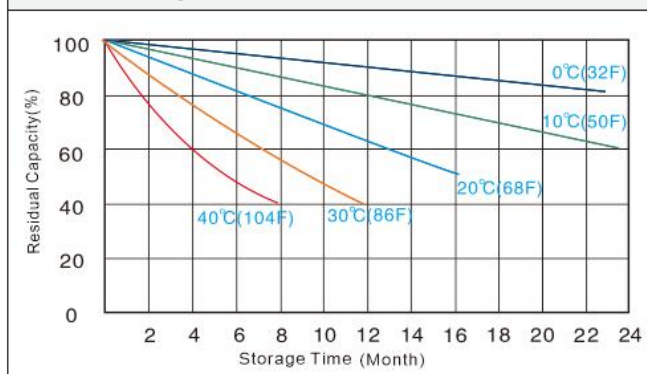
Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics



☆The datasheet subjects to change without prior notice, please contact with us if have any questions.