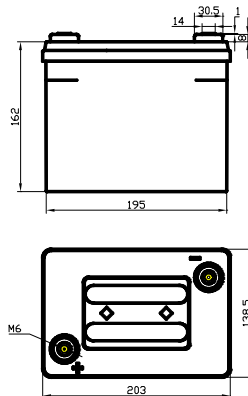


SPIRAL VRLA BATTERY

SPIRAL SEALED LEAD RECHARGEABLE BATTERY

The battery appearance:



Application Fields

- Instruments
- Electric tools
- Physical exercise devices
- Medical devices
- Solar light
- Electricity transferring equipment
- Standby power supply

The battery specifications:

Open circuit voltage	12V
Capacity (10 Hr.)	25Ah
Weight	9Kg
workable under	-45°C~65°C
Resistance	6.5mΩ
Specific energy (10h rate) wh/kg	33.3
Specific energy (1 ratio) wh/kg	26.7
Maximum power w/kg	550
Float Voltage (25°C)	13.6V
Cycle of charging voltage (25°C)	14.7V
CCA@32 Degrees	480
CCA	390

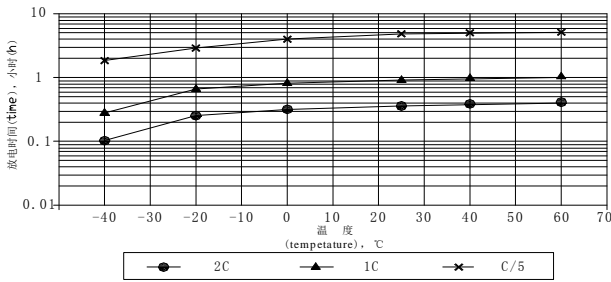
Characteristics

- ✚ Superior high and low temperature performance, workable under -55°C-75°C
- ✚ Good PSOC performance
- ✚ Excellent low current charge acceptance
- ✚ No free electrolyte, workable with any orientation
- ✚ Steady high voltage output, high energy density
- ✚ Fast chargeable, 95% state of charge can be reached in 40 minutes
- ✚ Starting type SPB can be discharged with super high discharge rate, the max. discharge rate is 18C₁₀
- ✚ Very good consistency, can be connected serially and/or in parallel
- ✚ Shelf life is almost 2 years
- ✚ Long service life
 - The cycle life is 350 under 100%DOD at C/5 discharge rate
 - The design service life under floating application is 15 years
 - The design service life in solar application is 10 years

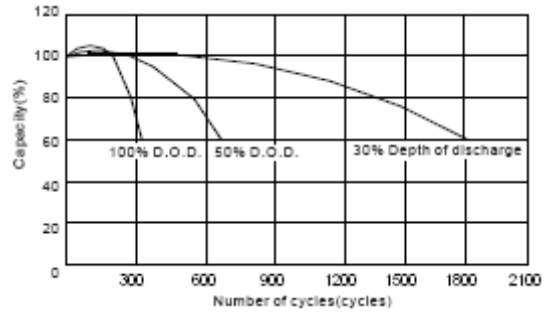
This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact CHINASHOTO for the latest information.

Electrical Performances :

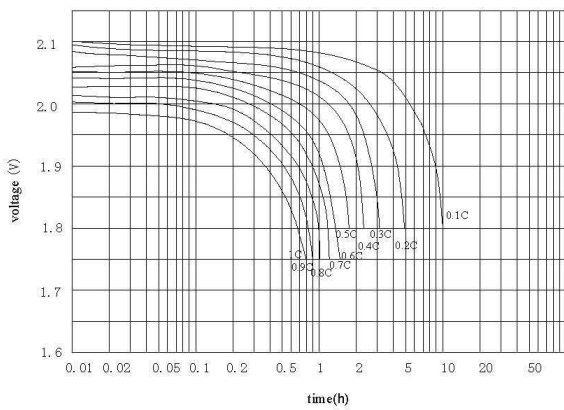
The influences of temperature on battery Capacity



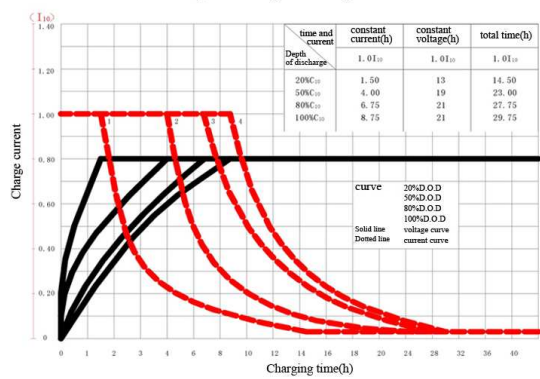
Cycle service life in relation to depth of discharge



Battery constant current discharge performance at 25°C



Different depth of charge-discharge characteristic curve



Discharge Characteristic :

6-SPB-25 discharge characteristics (25°C)

Time	discharge to 11.1V		discharge to 10.5V		discharge to 9.9V	
	constant current (A)	constant power (W)	constant current (A)	constant power (W)	constant current (A)	constant power (W)
2min	152.00	1677.00	195.50	1836.00	230.75	1959.00
5min	101.25	1137.00	121.25	1260.00	141.25	1374.00
10min	76.25	837.00	84.00	942.00	90.25	1047.00
15min	58.50	663.00	63.00	705.00	69.00	786.00
20min	47.25	552.00	53.75	609.00	56.75	636.00
30min	33.75	393.00	36.00	420.00	38.75	438.00
45min	25.25	288.00	26.75	306.00	27.25	312.00
1h	19.25	228.00	20.75	237.00	21.25	243.00
2h	10.25	123.00	10.75	129.00	11.25	132.00
3h	7.75	93.00	8.00	96.00	8.50	99.00
4h	5.75	69.00	6.00	72.00	6.25	78.00
5h	4.50	54.00	4.75	57.00	5.25	60.00
8h	2.75	33.00	3.00	36.00	3.25	39.00
10h	2.38	30.30	2.55	31.20	2.68	32.70
20h	1.30	13.80	1.35	14.40	1.43	15.00

