

● Deep Cycle Series Battery

DC series VRLA batteries are superior deep cycle design with thick plates, high-density active materials And Slightly stronger electrolyte, Which can withstand repeated deep cyclic applications. Deep cycle series Batteries are the special design batteries with 10 years floating design life at 25°C. Meet with IEC, UL(MH62092),CE approved.

● Application

- * Emergency Power System
- * Communication equipment
- * Telecommunication systems
- * Uninterruptible power supplies
- * Electric toy car and wheelchairs, etc.
- * Power tools
- * Golf cars and buggies
- * Marine equipment
- * Medical equipment
- * Solar and wind power system



● General Features

- * Heavy Duty Grid
- * Mechanized assembly
- * Non-spillable construction
- * High Reliability and Stability

● Construction

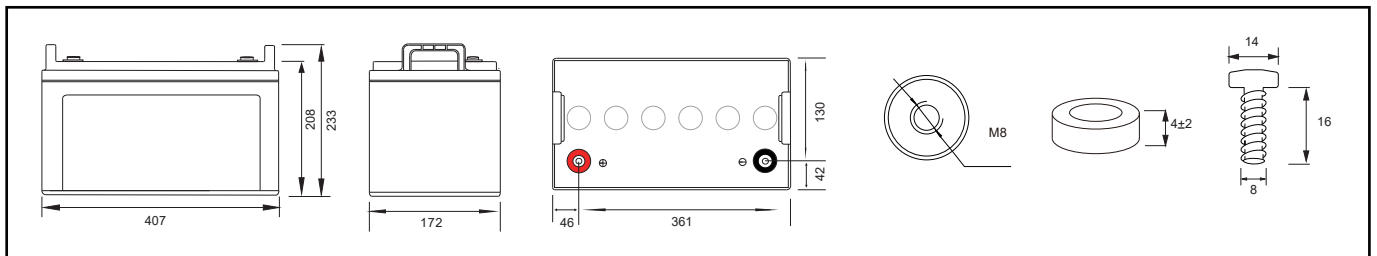
- * Positive Lead dioxide * Negative Lead
- * Electrolyte Sulfuric acid * Safety Valve EPDR
- * Separator Fiber glass * Terminal Copper
- * Container...ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)

● Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		100Ah	
	Cells Per battery		DC 12V-100AH	
Dimension	Length	Width	Height	Total Height
	407mm (16.02 inches)	172mm (6.77 inches)	208mm (8.18 inches)	233mm (9.17 inches)
Approx Weight	30kg (64.05lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(10.5V)	10 hour rate(10.8V)	5 hour rate(10.5V)	1 hour rate(9.6V)
	104.2Ah	100.0Ah	92.4Ah	60.0Ah
Max.discharge current	1200A (5 Sec.)			
	Full charged at 25°C(77°F): Approx 4.9mΩ			
Capacity affected by Temp.(20 HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge @25°C (77°F)	After 3 months storage		After 6 months storage	After 12 months storage
	98%		94%	74%
Charge method @25°C (77°F)	Cycle Use		Float Use	
	14.40-14.7V (Initial charging current less than 30A)		13.50-13.80V	

● Outer dimension (mm)

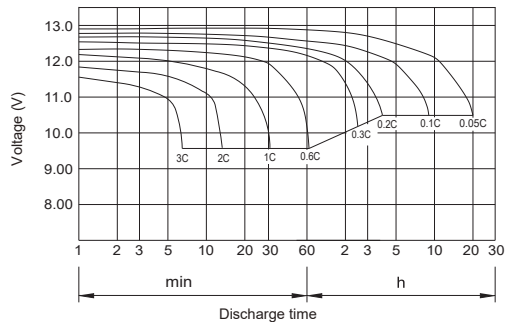
● Terminal Type (mm)



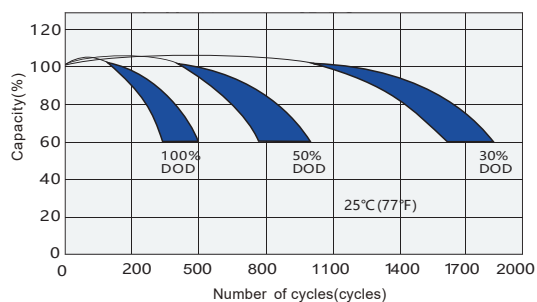
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)											
F.V\TIME		15MIN	30MIN	60MIN	90MIN	2 HR	3HR	5HR	8HR	10HR	20HR
1.60V/cell	A	174.500	105.000	60.000	43.913	38.441	27.383	18.687	12.742	10.376	5.714
	W	336.785	209.160	119.700	87.681	76.915	54.789	37.390	25.494	20.761	11.433
1.67V/cell	A	165.435	102.756	59.565	43.478	38.250	27.239	18.584	12.634	10.215	5.429
	W	319.539	204.794	118.841	86.835	76.596	54.600	37.252	25.332	20.481	10.884
1.70V/cell	A	161.356	101.859	59.130	43.435	38.154	27.170	18.580	12.508	10.086	5.284
	W	311.901	203.011	118.116	86.783	76.436	54.477	37.253	25.091	20.233	10.599
1.75V/cell	A	154.557	100.064	58.261	42.870	37.915	27.000	18.482	12.473	10.039	5.200
	W	299.068	199.579	116.667	85.739	75.944	54.162	37.074	25.040	20.075	10.439
1.80V/cell	A	148.212	97.821	57.826	42.565	37.676	26.856	18.430	12.366	10.000	5.029
	W	287.234	195.192	115.942	85.343	75.479	53.901	36.989	24.842	19.766	10.102

Note: The above datas are average values. (Edition 2023-07)

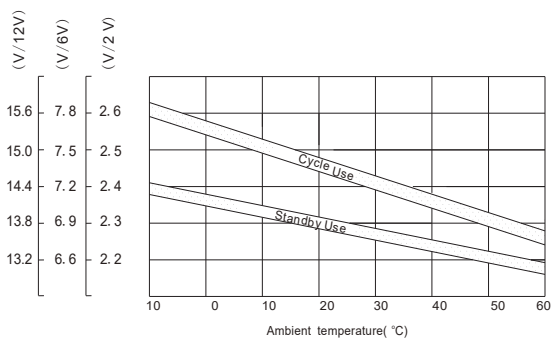
Discharge characteristic Curve



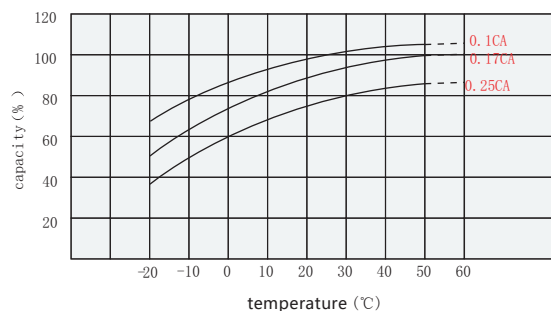
Cycle service life in relation to depth of discharge



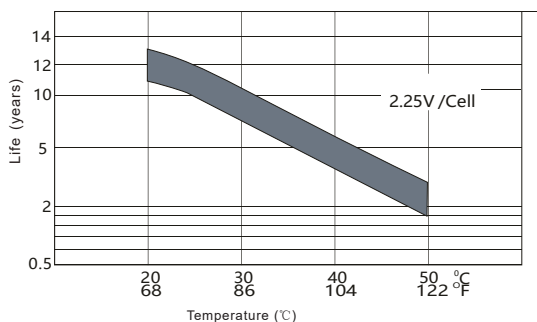
Relationship between charging voltage and temperature



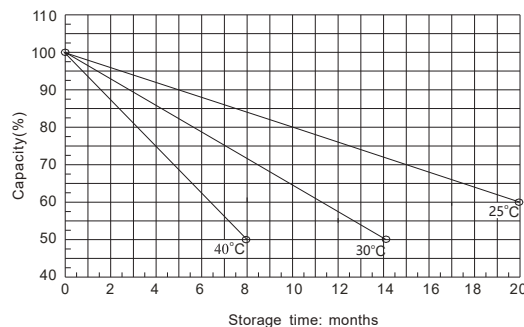
Relationship between temperature and capacity



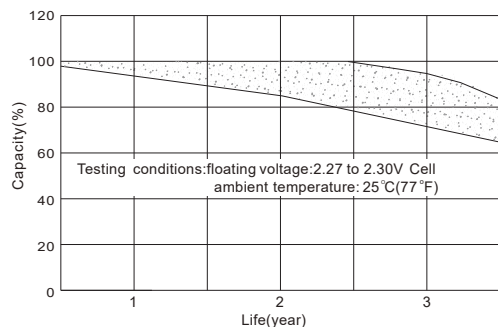
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use

