

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, BS,JIS and Eurobat standard.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
- * Generator



General Features

- * Safety Sealing
- * Non-spillable construction
- * High power density
- * Excellent recovery from Deep discharge
- * Thick plates and high active materials
- * Longer Life and low self-discharge design

Construction

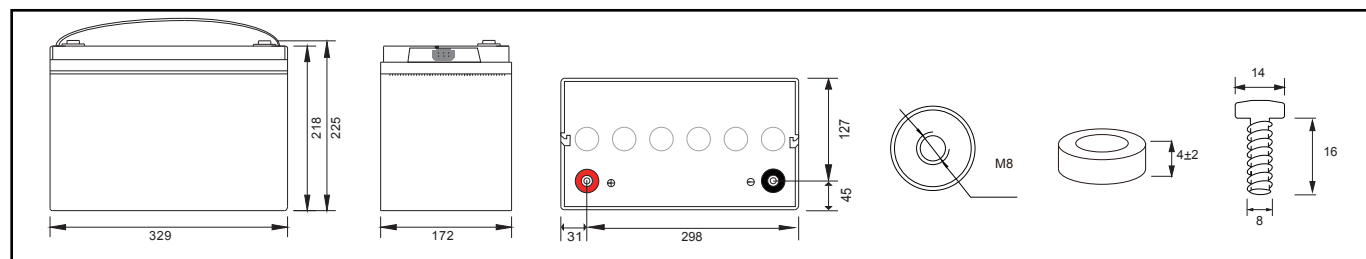
- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper

Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		100Ah	
	Cells Per battery		DC 12V-100AH 12V100AH	
Dimension	Length	Width	Height	Total Height
	329mm (12.79 inches)	172mm (6.77 inches)	218mm (8.58 inches)	225mm (8.85 inches)
Approx Weight	28.6kg (63.05lbs) ± 3%			
Capacity @ 25°C (77°F)	10 hour rate(10A,10.5V)	5 hour rate(17.93A,10.5V)	3 hour rate(26.06A,10.8V)	1 hour rate(56.1A,9.6V)
	100Ah	89.65Ah	78.18Ah	56.1Ah
Max.discharge current	1000A (5 Sec.)			
Internal Resistance	Full charged at 25°C: Approx 3.8mΩ			
Capacity affected by Temp.(10 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
	91%		82%	64%
Charge method @25°C (77°F)	Cycle Use		Float Use	
	14.40-14.70V (Initial charging current less than 30A)		13.50-13.80V	

Outer dimension (mm)

Terminal Type (mm)

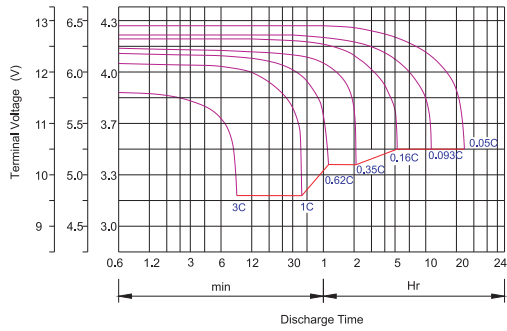


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

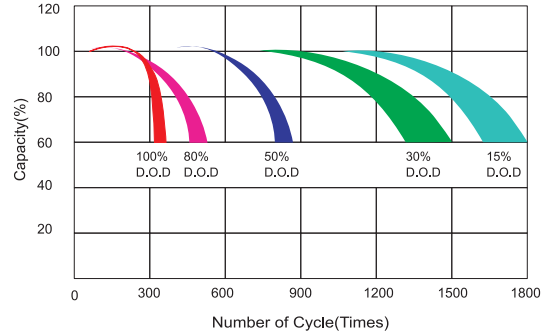
F.V/time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	179.800	107.400	56.100	41.059	37.302	26.572	18.134	12.742	10.376	5.846
	347.014	213.941	111.920	81.982	74.636	53.165	36.282	25.494	20.761	11.697
1.67V	170.460	105.105	55.693	40.652	37.117	26.432	18.034	12.634	10.215	5.554
	329.244	209.475	111.116	81.191	74.326	52.982	36.148	25.332	20.481	11.135
1.70V	166.257	104.187	55.287	40.612	37.024	26.365	18.029	12.508	10.086	5.406
	321.374	207.652	110.438	81.142	74.171	52.863	36.149	25.091	20.233	10.844
1.75V	159.251	102.351	54.474	40.083	36.791	26.200	17.934	12.473	10.000	5.320
	308.152	204.141	109.083	80.166	73.693	52.557	35.975	25.040	20.075	10.680
1.80V	152.713	100.056	54.067	39.798	36.559	26.061	17.884	12.366	9.839	5.145
	295.958	199.654	108.406	79.796	73.242	52.304	35.893	24.842	19.766	10.336
1.85V	144.774	97.303	53.254	39.351	36.234	25.828	17.784	12.204	9.677	4.969
	280.862	194.299	106.935	79.096	72.623	51.889	35.728	24.543	19.461	9.993

Note: The above data are average values. (Edition 2023-05)

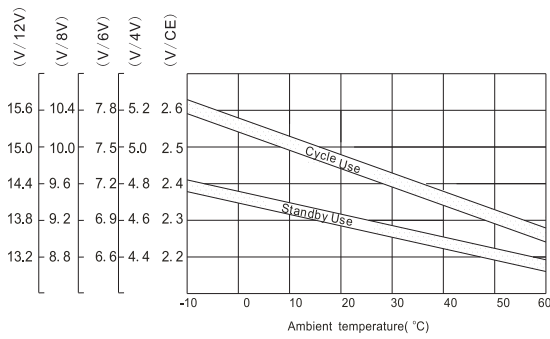
Discharge characteristic Curve



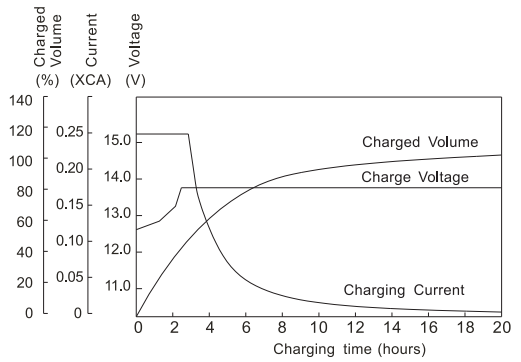
Cycle service life in relation to depth of discharge



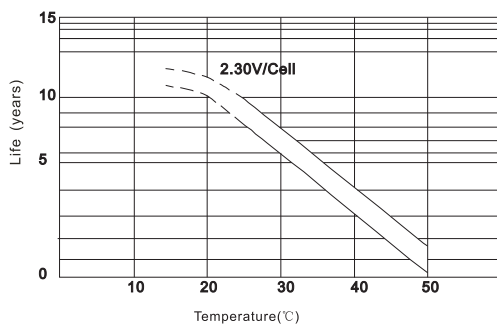
Relationship between charging voltage and temperature



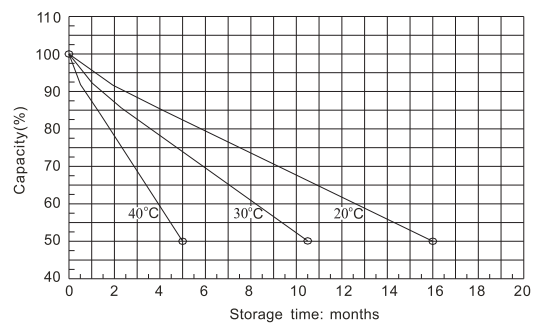
Constant voltage charging characteristic (0.25CA, at 25°C)



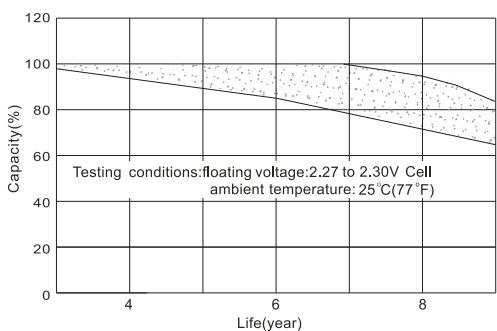
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use

