

### 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



### 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

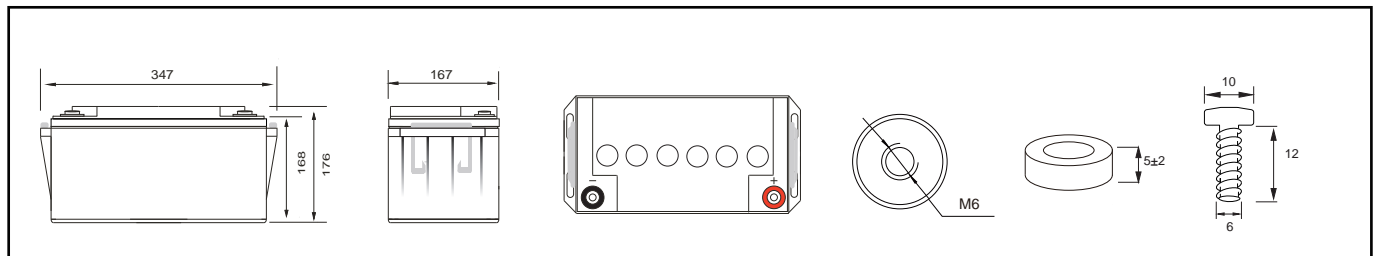
- \* Positive ..... Lead dioxide
- \* Electrolyte ..... Sulfuric acid
- \* Separator ..... Fiber glass
- \* Container ..... ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- \* Negative ..... Lead
- \* Safety Valve ..... EPDR
- \* Terminal ..... Copper

### Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		65Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	347mm (13.66 inches)	167mm (6.57 inches)	176mm (6.92 inches)	176mm (6.92 inches)
Approx Weight	19.1kg (42.10lbs) ± 3%			
Capacity @ 25°C (77°F)	10 hour rate(6.5A,10.8V)	5 hour rate(10.4A,10.5V)	3 hour rate(16.3A,10.2V)	1 hour rate(39A,9.6V)
	65Ah	52Ah	48.9Ah	39Ah
Max.discharge current	650A (5 Sec.)			
Internal Resistance	Full charged at 25°C: Approx 5.8mΩ			
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	
	14.1-14.4V (Initial charging current less than 19.5A)		13.50-13.80V	

### Outer dimension (mm)

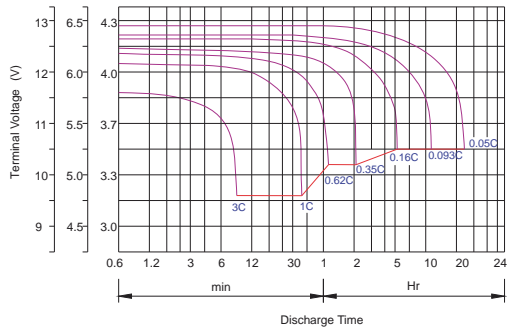
### Terminal Type (mm)



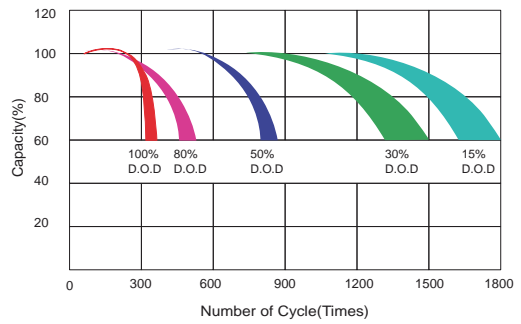
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

F.V.TIME		5min	10min	15min	30min	1 hr	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	20 hr
9.60V	A	208.00	137.00	111.00	74.10	39.00	22.80	16.70	13.00	10.70	7.61	6.83	3.69
	W	2149.00	1465.00	1185.00	797.00	421.00	250.00	186.00	146.00	122.00	87.00	79.00	42.90
10.20V	A	202.00	124.00	104.00	70.90	36.70	21.70	16.30	12.70	10.50	7.41	6.70	3.58
	W	2153.00	1382.00	1165.00	795.00	415.00	250.00	188.00	147.00	123.00	87.00	79.00	41.90
10.50V	A	195.00	111.00	91.00	66.30	35.50	21.20	15.90	12.50	10.40	7.35	6.57	3.58
	W	2130.00	1259.00	1039.00	763.00	411.00	246.00	185.00	146.00	122.00	86.00	78.00	42.30
10.80V	A	188.00	104.00	85.00	61.10	34.30	20.70	15.50	12.30	10.10	7.15	6.50	3.51
	W	2109.00	1203.00	975.00	708.00	399.00	242.00	182.00	145.00	120.00	85.00	77.00	41.80
11.10V	A	182.00	98.00	78.00	54.60	33.20	20.20	15.00	12.00	9.90	6.96	6.18	3.32
	W	2060.00	1132.00	909.00	639.00	390.00	238.00	178.00	142.00	118.00	83.00	74.50	40.20

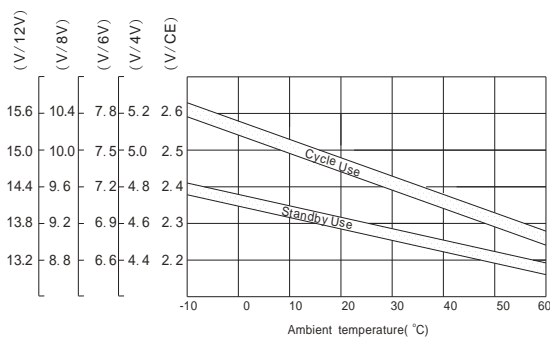
### Discharge characteristic Curve



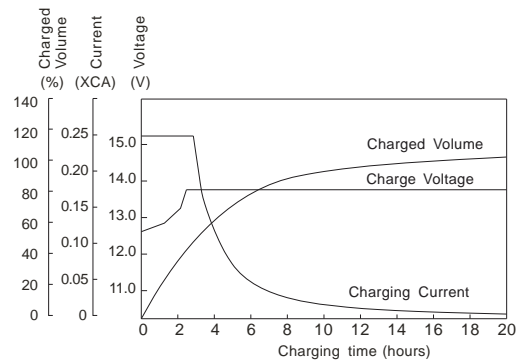
### Cycle service life in relation to depth of discharge



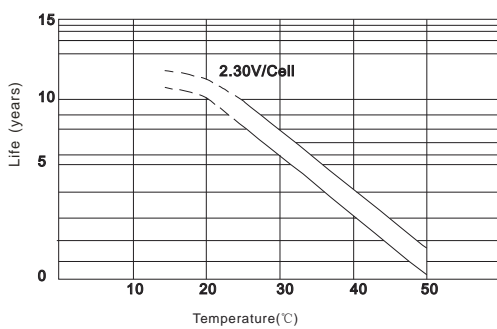
### Relationship between charging voltage and temperature



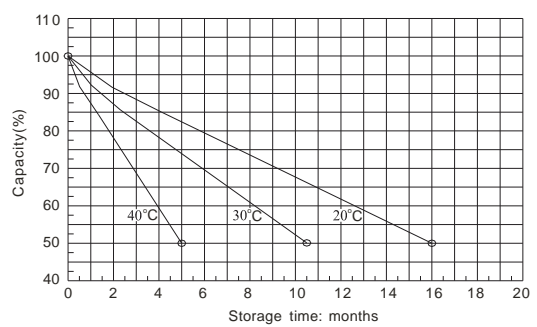
### Constant voltage charging characteristic (0.25CA, at 25°C)



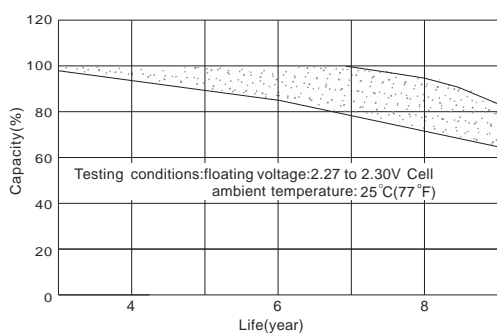
### Temperature effects on float life



### Self-discharge characteristic



### Life characteristics of standby use



### Charge characteristic Curve for standby use

