

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

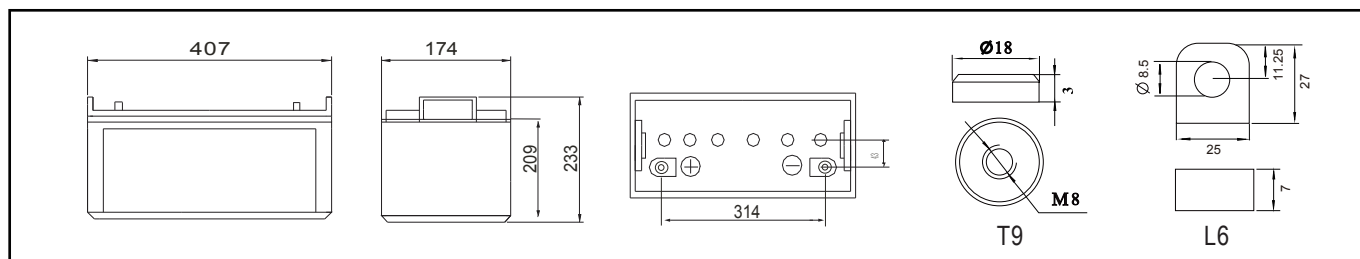
Construction

- * 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)			120Ah
	Cells Per battery			6
Dimension	Length	Width	Height	Total Height
	407mm (16.02 inches)	174mm (6.85 inches)	209mm (8.23 inches)	233mm (9.17 inches)
Approx Weight	33.0kg (72.75lbs) ± 3%			
Capacity @ 25°C (77°F)	10 hour rate(12A,10.8V)	5 hour rate(19.2A,10.5V)	3 hour rate(30A,10.2V)	1 hour rate(72A,9.6V)
	120Ah	96Ah	90Ah	72Ah
Max.discharge current	1200A (5 Sec.)			
Internal Resistance	Full charged at 25°C: Approx 3.7mΩ			
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 36A)			13.50-13.80V

Outer dimension (mm)

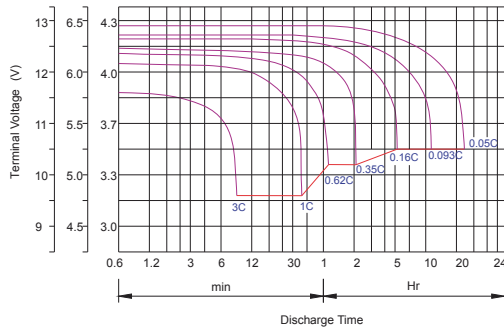


Terminal Type (mm)

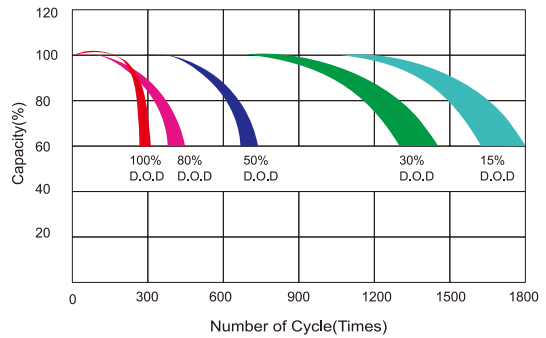
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

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	384.0	253.0	204.0	137.0	72.0	42.0	31.0	24.0	19.8	14.0	12.6	6.8
	W	3967.0	2704.0	2189.0	1471.0	778.0	461.0	343.0	270.0	225.1	160.9	145.5	79.1
10.20V	A	372.0	228.0	192.0	131.0	68.0	40.0	30.0	23.4	19.4	13.7	12.4	6.6
	W	3976.0	2551.0	2151.0	1468.0	765.0	462.0	347.0	272.1	226.6	160.1	145.2	77.4
10.50V	A	360.0	204.0	168.0	122.0	66.0	39.0	29.0	23.0	19.2	13.6	12.1	6.6
	W	3933.0	2325.0	1919.0	1409.0	759.0	454.0	341.0	269.6	225.1	159.5	143.4	78.0
10.80V	A	347.0	193.0	156.0	113.0	63.0	38.0	29.0	22.7	18.7	13.2	12.0	6.5
	W	3894.0	2221.0	1800.0	1307.0	738.0	447.0	337.0	267.8	221.3	156.4	142.6	77.2
11.10V	A	335.0	180.0	144.0	101.0	61.0	37.0	28.0	22.1	18.2	12.8	11.4	6.1
	W	3803.0	2090.0	1679.0	1179.0	720.0	440.0	328.0	263.0	217.7	153.8	137.6	74.2

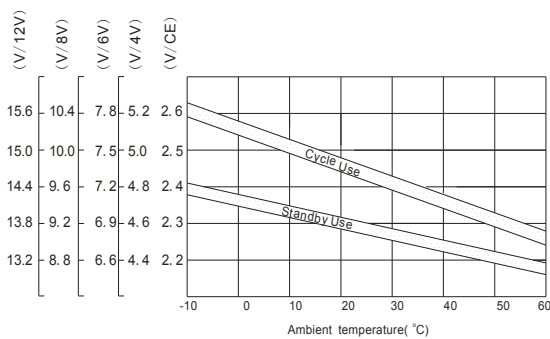
Discharge characteristic Curve



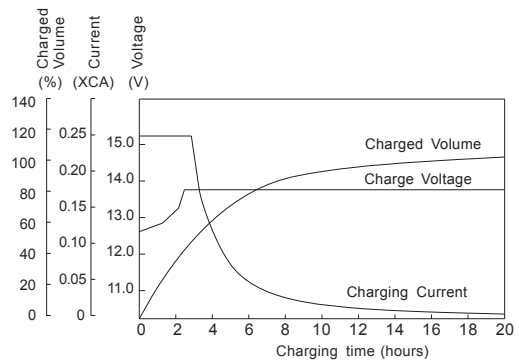
Cycle service life in relation to depth of discharge



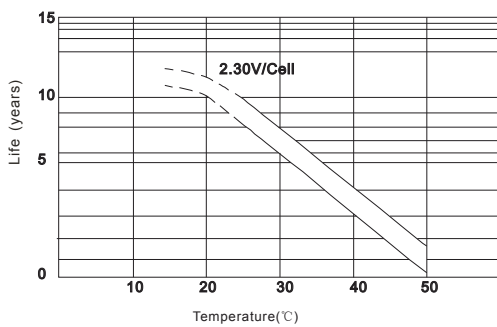
Relationship between charging voltage and temperature



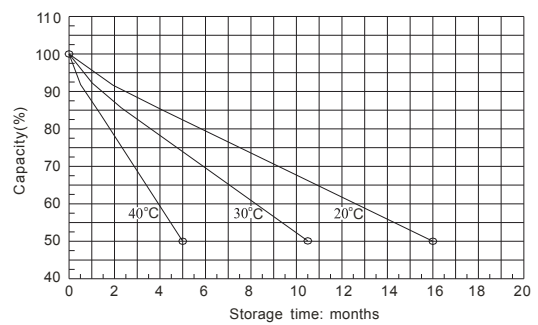
Constant voltage charging characteristic (0.25CA, at 25°C)



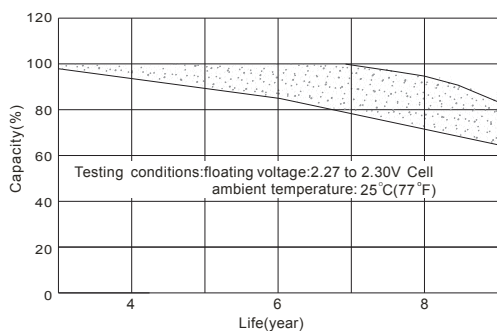
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use

