

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 12 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.

- * Generator,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

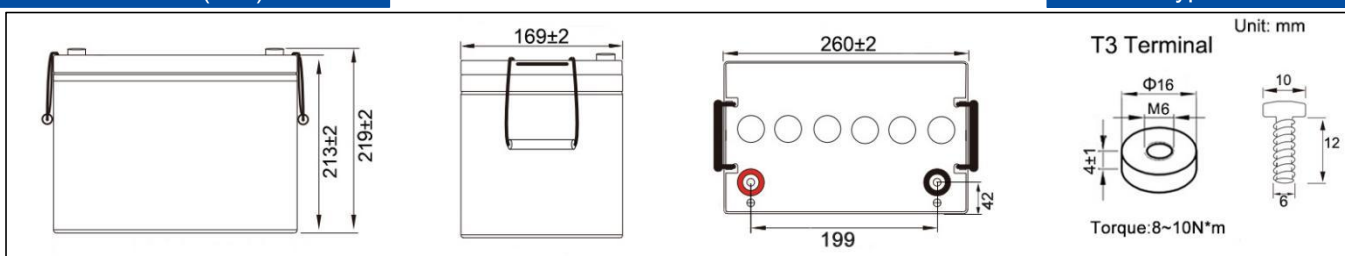
Construction

- * 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 (6 cells per unit)	
	Rated capacity (10 Hour rate)		80Ah	
Dimension	Length	Width	Height	Total Height
	260mm (10.24 inches)	169mm (6.65 inches)	213mm (8.38 inches)	219mm (8.62 inches)
Approx Weight	24.1kg (53.13lbs) ± 3%			
Internal Resistance	Full charged at 25°C(77°F): Approx 4.36mΩ			
Maximum Charge Current	24A			
Max.discharge current	800A (5Sec.)			
Short-circuit current	1650A			
Operating Temperature Range	Nominal Operating Temperature	Discharge	Charge	Storage
	25°C(77°F)	-15°C~ 50°C (5°F~122°F)	-15°C~ 40°C (5°F~104°F)	-15°C~ 40°C (5°F~104°F)
Capacity @ 25°C (77°F)	10 hour rate(8A,10.8V)	5 hour rate(13.6A,10.5V)	3 hour rate(20.09A,10.2V)	1 hour rate(48.0A,9.6V)
	80Ah	68Ah	60.27Ah	48.00Ah
Capacity affected by Temp.(10HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Charge method at 25°C(77°F)	Float Charging Voltage		Equalization Charging Voltage	
	13.5~13.8 VDC (-3mV/cell/°C)		14.1~14.4 VDC (-4mV/cell/°C)	
			Cycle Use Voltage	
			14.4~15.0 VDC (-5mV/cell/°C)	

Outer dimension (mm)

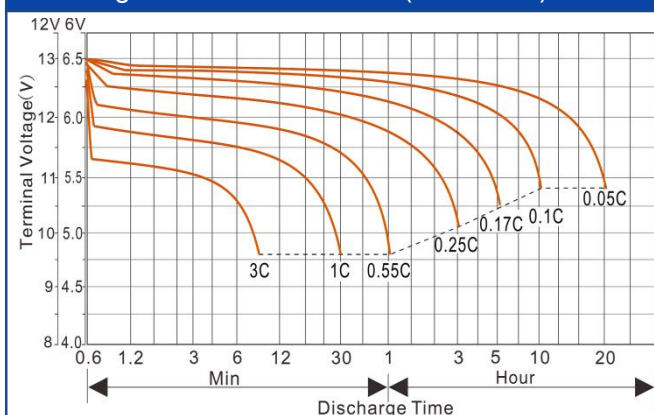


Terminal Type

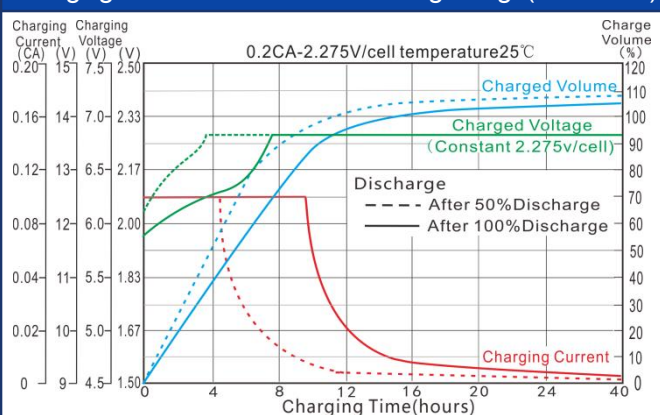
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

F.V/Time		5min	10min	15min	20min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	159	127	106	88.2	68.3	41.2	25.2	18.67	12.83	8.69	7.62	4.10
	W	296	240	202	169	131.4	79.8	49.1	36.57	25.23	17.18	15.13	8.27
1.80V/cell	A	180	141	116	93.9	71.9	43.1	26.2	19.16	13.17	8.88	7.72	4.14
	W	330	260	216	178	136.7	82.6	50.7	37.56	25.71	17.44	15.30	8.33
1.75V/cell	A	199	152	124	99.0	75.0	44.8	27.1	19.65	13.45	9.03	7.82	4.18
	W	360	278	227	187	141.9	85.1	52.1	38.41	26.11	17.67	15.44	8.37
1.70V/cell	A	217	163	130	104	77.9	46.2	27.9	20.09	13.69	9.17	7.90	4.23
	W	388	294	238	193	146.1	87.3	53.2	39.15	26.46	17.87	15.55	8.40
1.67V/cell	A	225	168	134	106	79.4	46.9	28.3	20.36	13.77	9.22	7.95	4.26
	W	402	303	243	196	148.1	88.2	53.6	39.40	26.57	17.93	15.60	8.42
1.60V/cell	A	240	177	139	110	81.6	48.0	28.8	20.86	13.93	9.31	8.03	4.30
	W	424	317	251	201	151.3	89.8	54.5	39.89	26.80	18.06	15.67	8.44

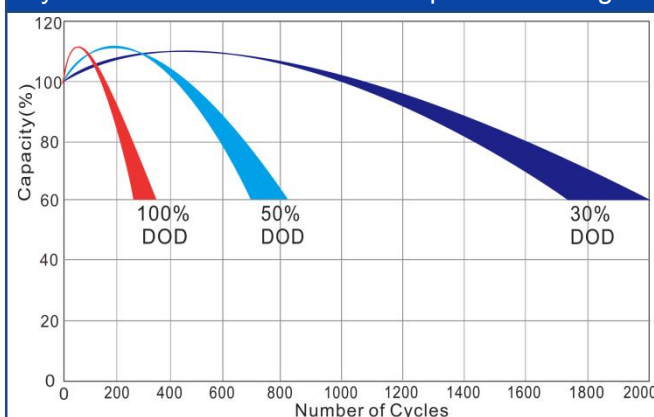
Discharge characteristic curve (25°C/77°F)



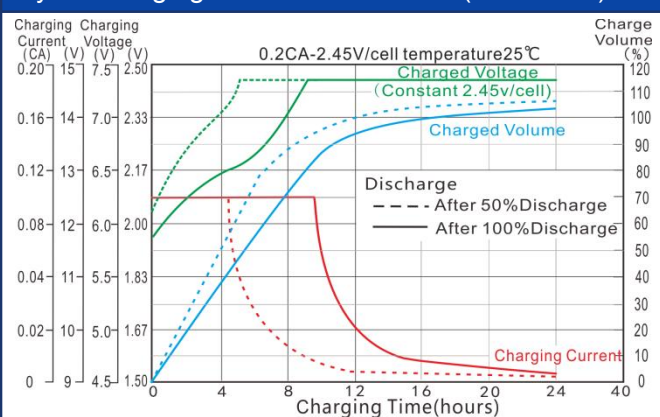
Charging characteristic curve of floating charge (25°C/77°F)



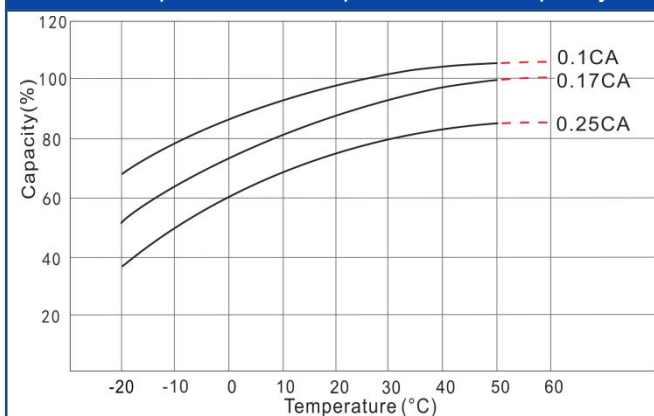
Cycle service life in relation to depth of discharge



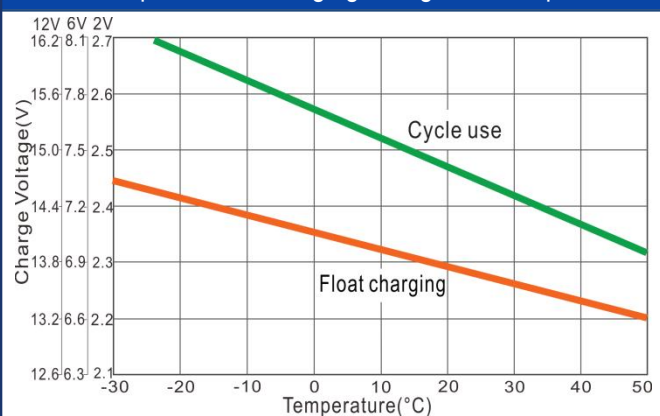
Cyclic charging characteristic curve (25°C/77°F)



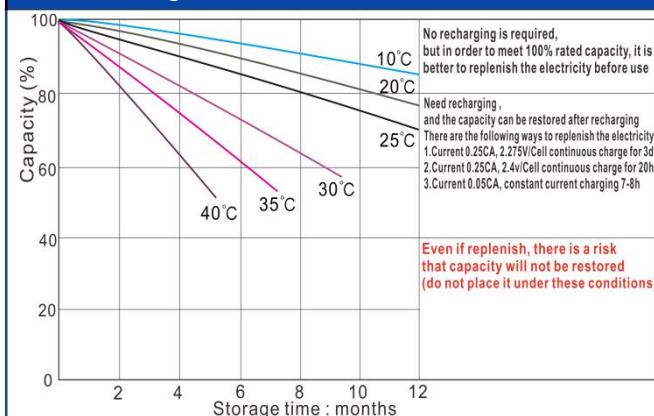
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self discharge characteristics



Temperature vs Float Life

