



Deep Cycle Series Battery

DDC series VRLA batteries are designed with a continuous rolling and stamping grid structure, which can withstand repeated deep cyclic applications.

Deep cycle series Batteries are the special design batteries with 15 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

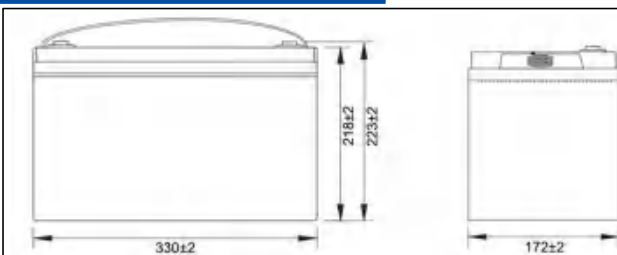
Construction

- * 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

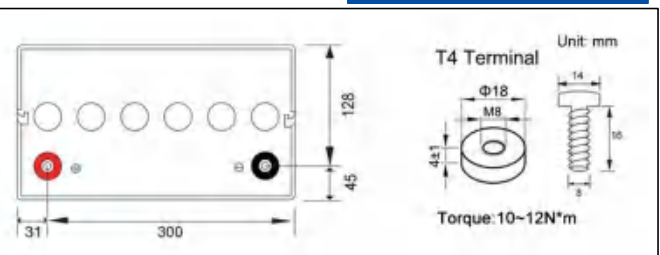
Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Rated capacity (10 Hour rate)		100Ah	
Dimension	Length	Width	Height	Total Height
	330mm (12.99 inches)	172mm (6.77 inches)	218mm (8.58 inches)	223mm (8.78 inches)
Approx Weight	28.0kg (61.73lbs) ± 3%			
Internal Resistance	Full charged at 25°C (77°F): Approx 3.35mΩ			
Maximum Charge Current	30A			
Max. discharge current	1000A (5Sec.)			
Short-circuit current	2000A			
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 (10.0A, 10.8V)	5 hour rate (17.0A, 10.8V)	3 hour rate (26.5A, 10.2V)	1 hour rate (65.7A, 9.6V)
	100.0Ah	85.0Ah	79.5Ah	65.7Ah
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	Float Charging Voltage		Equalization Charging Voltage	
	13.5 ~ 13.8 VDC/Unit at 25°C (77°F)		14.4~15.0 VDC/Unit at 25°C (77°F)	

Outer dimension (mm)



Terminal Type

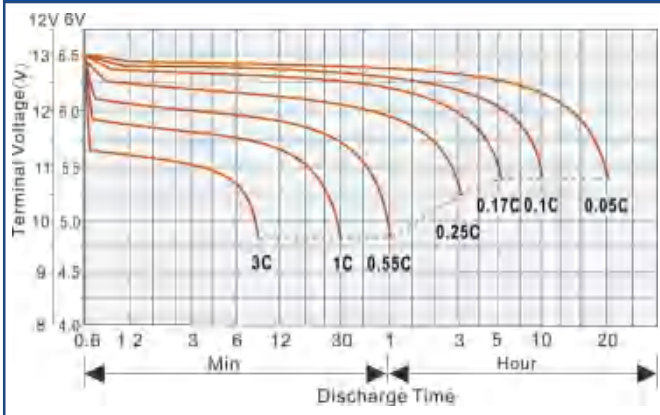


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

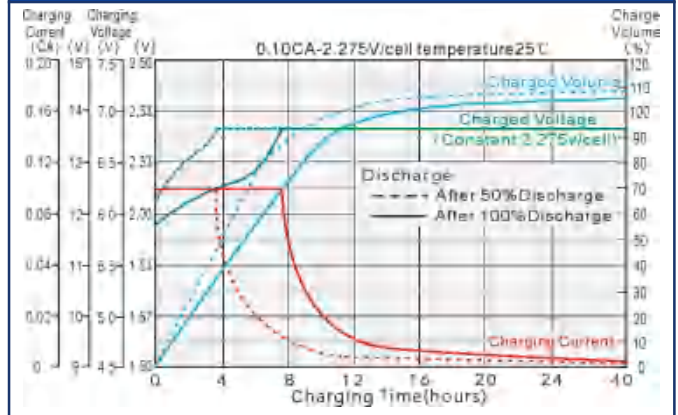
F.V/Time		5min	10min	15min	20min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	222	175	148	126	96	58.6	35.6	25.0	16.6	11.7	9.9	5.18
	W	420	334	284	246	195	119.0	72.5	50.5	33.6	23.6	19.9	10.42
1.80V/cell	A	244	189	156	133	99	60.2	36.1	25.7	17.0	11.9	10.0	5.26
	W	454	357	300	260	199	122.0	73.3	51.2	34.1	23.8	20.0	10.57
1.75V/cell	A	266	204	164	140	103	62.0	36.7	26.2	17.2	12.1	10.1	5.35
	W	487	378	314	270	204	124.0	74.1	52.1	34.4	24.0	20.2	10.71
1.70V/cell	A	282	215	173	146	107	63.2	37.3	26.5	17.4	12.2	10.2	5.45
	W	512	396	328	280	209	126.0	74.8	52.6	34.7	24.2	20.4	10.83
1.67V/cell	A	292	222	178	149	109	64.1	37.8	26.8	17.5	12.3	10.3	5.49
	W	529	407	337	285	212	127.5	75.5	52.9	34.8	24.4	20.5	10.89
1.60V/cell	A	308	233	188	156	112	65.7	38.8	27.2	17.8	12.5	10.4	5.52
	W	553	425	350	295	218	130.3	77.2	53.5	35.2	24.7	20.6	10.95



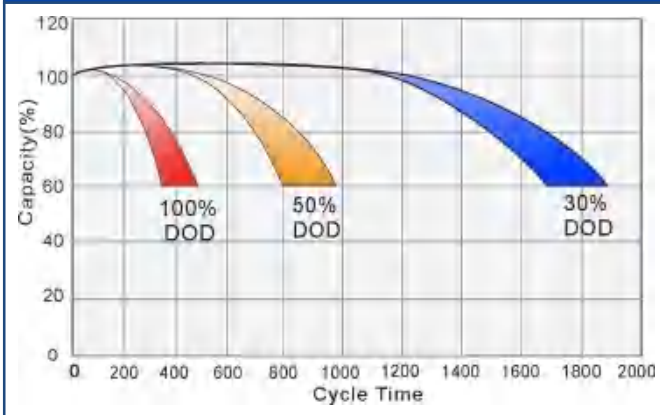
Discharge characteristic curve (25°C/77°F)



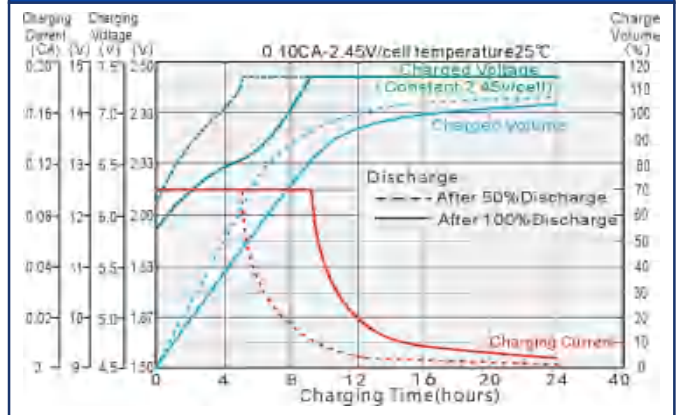
Charging characteristic curve of floating charge(25°C/77°F)



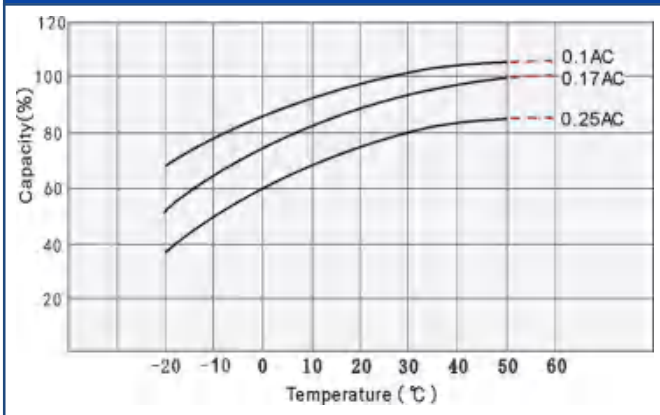
Cycle service life in relation to depth of discharge



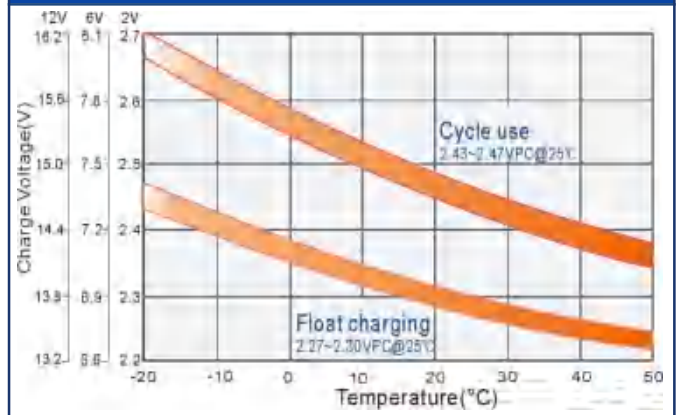
Cyclic charging characteristic curve (25°C/77°F)



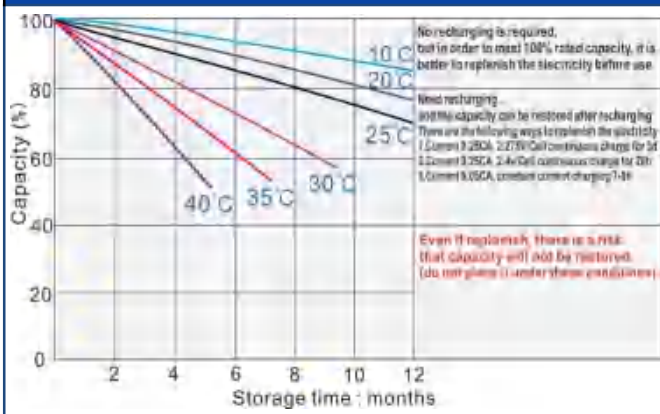
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self discharge characteristics



Temperature vs Float Life

