

DC series valve regulated lead-acid battery adopts continuous casting and rolling to produce a compact grain structure and stamped grid design, making it more corrosion-resistant. Can withstand repeated deep loop applications. Deep cycle series Batteries are the special design batteries with 8 years floating design life at 25 °C. Meet with IEC, BS,JIS and Eurobat standard.UL(MH62092),CE approved.

- * Emergency Power System
- * Communication equipment
- * Telecommunication systems
- * Uninterruptible power supplies
- * Electric toy car and wheelchairs, etc.

- * Power tools
- * Alarm system
- * Marine equipment
- * Medical equipment
- * Fire and Security System



- * Heavy Duty Grid
- * Mechanized assembly
- * Non-spillable construction
- * High Reliability and Stability
- * Sealed and Maintenance-free
- * Long Life and low self-discharge design

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

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Rated capacity (20 Hour rate)		18Ah	
Dimension	Length	Width	Height	Total Height
	182mm (7.16 inches)	77mm (3.03 inches)	167mm (6.57 inches)	167mm (6.57 inches)
Approx Weight	5.35kg (11.79 lbs) ± 3%			
Internal Resistance	Full charged at 25℃(77℉): Approx 12.1(mΩ/25℃± 15%)			
Maximum Charge Current	5.4A			
Max.discharge current	270A (5Sec.)			
Short-circuit current	550A			
Operating Temperature Range	Nominal Operating Temperature	Discharge	Charge	Storage
	25℃(77℉)	-15℃~ 50℃ (5℉~122℉)	-15℃~ 40℃ (5℉~104℉)	-15℃~ 40℃ (5℉~104℉)
Capacity @ 25℃ (77℉)	20 hour rate(0.925A,10.5V)	10 hour rate(1.725A,10.5V)	3 hour rate(4.79A,10.2V)	1 hour rate(11.96A,9.6V)
	18.50Ah	17.25Ah	14.37Ah	11.96Ah
Capacity affected by Temp.(10HR)	40℃ (104℉)	25℃ (77℉)	0℃ (32℉)	-15℃ (5℉)
	102%	100%	85%	65%
Charge method at 25℃(77℉)	Float Charging Voltage		Equalization Charging Voltage	Cycle Use Voltage
	13.5~13.8 VDC (-3mV/cell/℃)		14.1~14.4 VDC (-4mV/cell/℃)	14.4~15.0 VDC (-5mV/cell/℃)

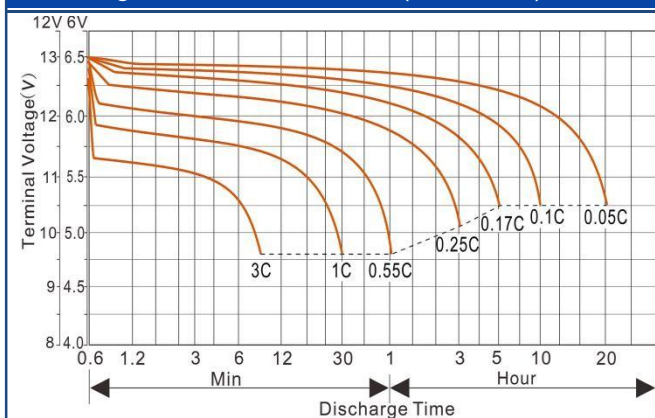
Terminal **Unit: mm**

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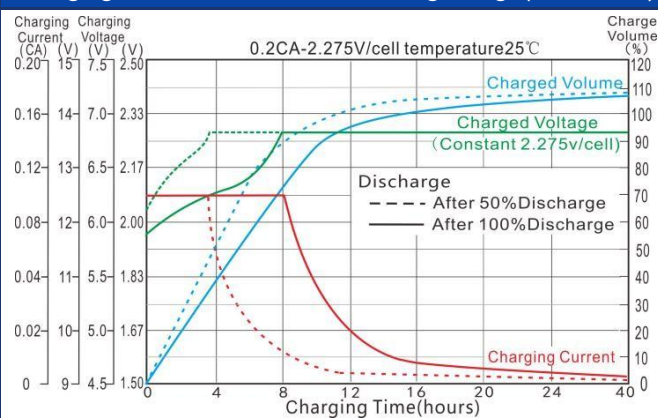
Torque: 2~4N*m

F.V/Time		5min	10min	15min	20min	30min	1h	1.5h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	54.2	37.0	28.8	23.7	17.80	10.46	7.60	6.07	4.48	3.064	2.038	1.665	0.893
	W	102.8	71.1	55.7	46.1	34.89	20.74	15.14	12.11	8.96	6.133	4.086	3.342	1.797
1.80V/cell	A	59.2	39.6	30.6	25.1	18.70	10.88	7.87	6.27	4.60	3.128	2.076	1.697	0.910
	W	110.9	75.5	58.9	48.6	36.51	21.51	15.63	12.47	9.17	6.244	4.152	3.398	1.826
1.75V/cell	A	64.0	42.1	32.3	26.4	19.51	11.25	8.11	6.44	4.70	3.184	2.110	1.725	0.925
	W	118.4	79.8	61.8	50.9	37.96	22.18	16.07	12.78	9.34	6.341	4.211	3.446	1.852
1.70V/cell	A	68.5	44.4	33.9	27.6	20.26	11.58	8.31	6.59	4.79	3.235	2.140	1.749	0.938
	W	125.2	83.7	64.5	53.0	39.28	22.78	16.42	13.05	9.50	6.430	4.263	3.488	1.875
1.67V/cell	A	70.8	45.6	34.7	28.2	20.63	11.74	8.40	6.65	4.83	3.260	2.154	1.758	0.943
	W	128.7	85.7	65.9	54.0	39.94	23.06	16.58	13.15	9.57	6.473	4.287	3.503	1.883
1.60V/cell	A	74.7	47.6	36.1	29.2	21.20	11.96	8.53	6.75	4.90	3.294	2.175	1.773	0.951
	W	134.3	89.0	68.3	55.7	40.96	23.46	16.82	13.33	9.70	6.533	4.325	3.529	1.897

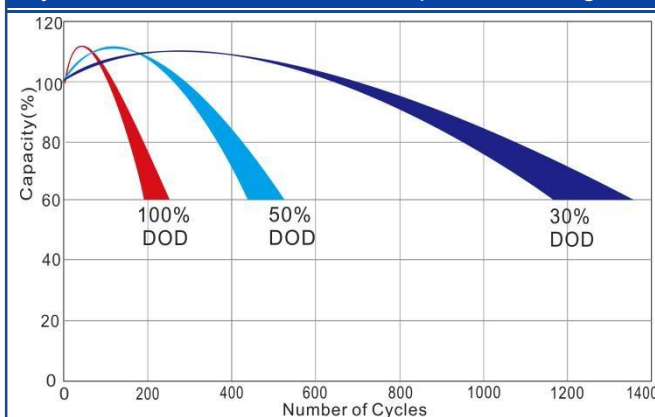
Discharge characteristic curve (25°C/77°F)



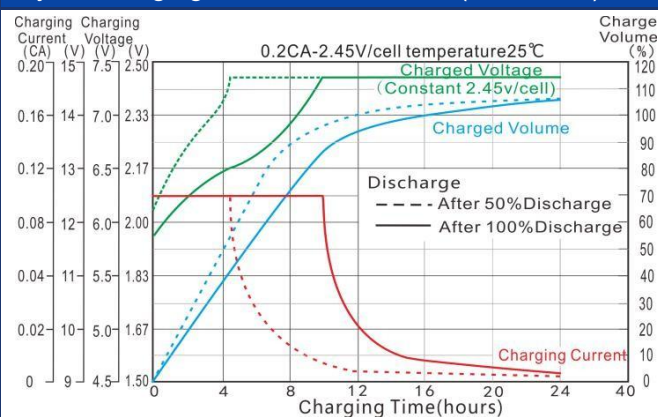
Charging characteristic curve of floating charge (25°C/77°F)



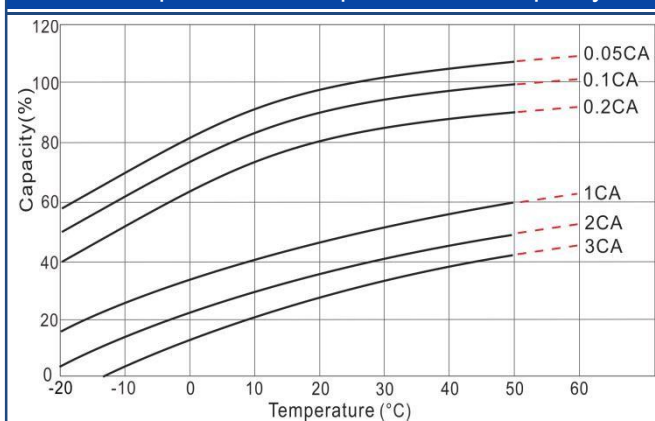
Cycle service life in relation to depth of discharge



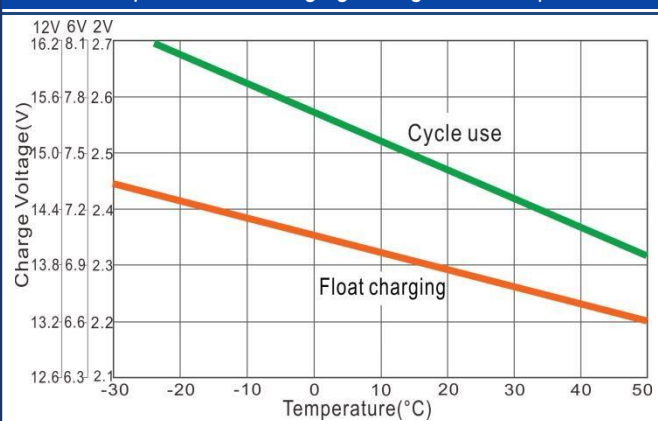
Cyclic charging characteristic curve (25°C/77°F)



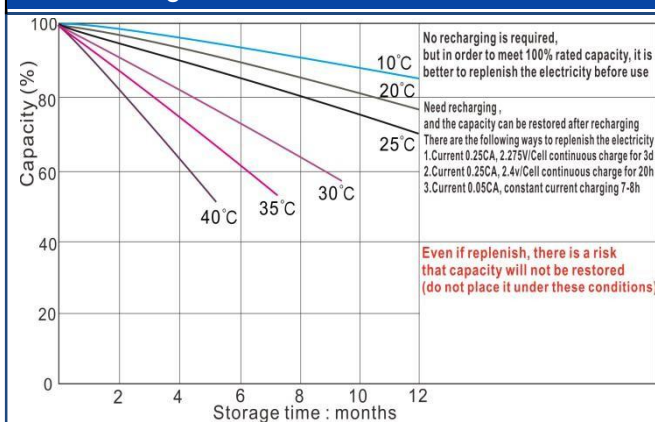
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self discharge characteristics



Temperature vs Float Life

