

Deep Cycle GelSeries Battery

Deep Cycle Gel series VRLA batteries are designed with a continuous rolling and stamping deep cyclic applications.
Deep Cycle Gel series Batteries are the special design batteries with 15 years floating design. Meet with IEC, BS, JIS and Eurobat standard, UL(MH62092), and 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

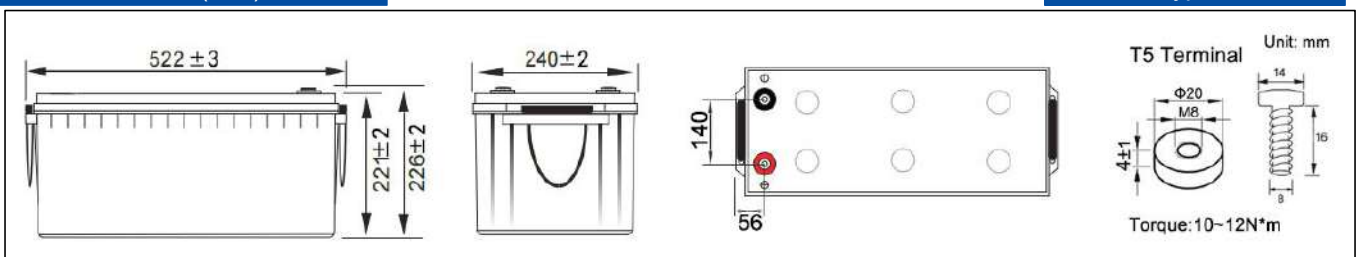
Construction

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

Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Rated capacity (10 Hour rate)		200Ah	
Dimension	Length	Width	Height	Total Height
	522mm (20.55 inches)	240mm (9.44 inches)	221mm (8.70 inches)	226mm (8.89 inches)
Approx Weight	56.8kg (125.22lbs) ± 3%			
Internal Resistance	Full charged at 25°C(77°F): Approx 2.28mΩ			
Maximum Charge Current	60A			
Max. discharge current	1600A (5Sec.)			
Short-circuit current	3000A			
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(20.00A, 10.8V)	5 hour rate(34.79A, 10.5V)	3 hour rate(52.4A, 10.2V)	1 hour rate(126.0A, 9.6V)
	200.0Ah	173.95Ah	157.2Ah	126.0Ah
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	Cycle Use Voltage	
	13.5~13.8 VDC (-3mV/cell/°C)	14.1~14.4 VDC (-4mV/cell/°C)	14.4~15.0 VDC (-5mV/cell/°C)	

Outer dimension (mm)



Terminal Type

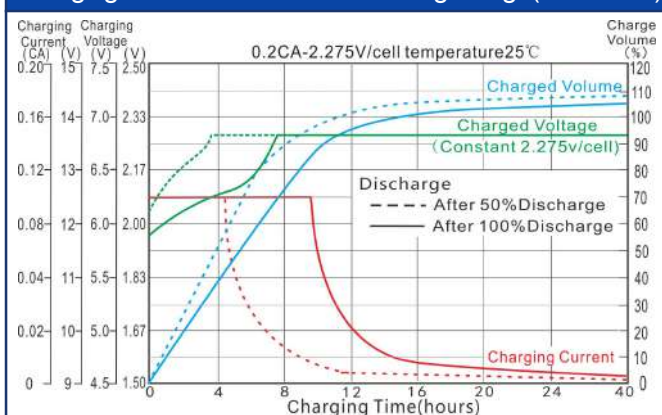
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

F.V/Time		5min	10min	15min	20min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	420	340	275	230	185	114.0	70.5	49.6	33.60	23.62	19.75	10.45
	W	788	645	527	443	359	224.5	140.3	99.2	67.45	47.53	39.77	21.08
1.80V/cell	A	492	375	299	248	195	117.3	71.7	50.7	34.24	24.00	20.00	10.70
	W	904	701	566	473	377	230.0	142.2	101.0	68.51	48.14	40.15	21.52
1.75V/cell	A	557	407	321	264	203	120.2	72.8	51.6	34.79	24.32	20.18	10.80
	W	1003	750	600	499	390	234.8	143.9	102.5	69.41	48.65	40.40	21.67
1.70V/cell	A	617	436	341	278	210	122.8	73.8	52.4	35.27	24.58	20.30	10.86
	W	1089	792	630	521	401	239.0	145.5	103.8	70.19	49.06	40.55	21.74
1.67V/cell	A	647	450	351	285	213	124.1	74.3	52.8	35.49	24.71	20.36	10.89
	W	1130	811	645	532	406	241.1	146.2	104.5	70.54	49.26	40.63	21.78
1.60V/cell	A	692	470	366	295	218	126.0	75.0	53.4	35.80	24.88	20.45	10.90
	W	1187	836	666	547	414	244.3	147.4	105.5	71.05	49.52	40.75	21.77

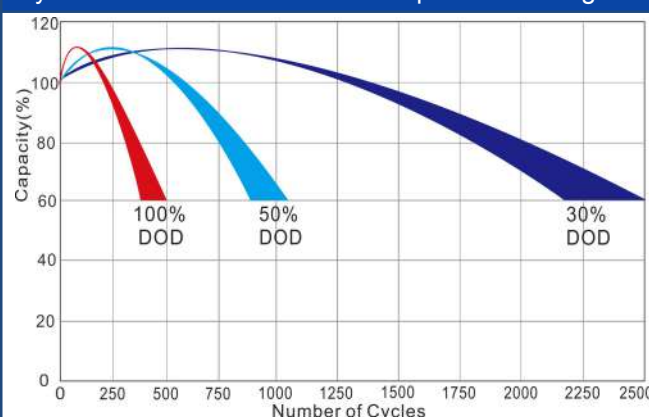
Discharge characteristic curve (25°C/77°F)



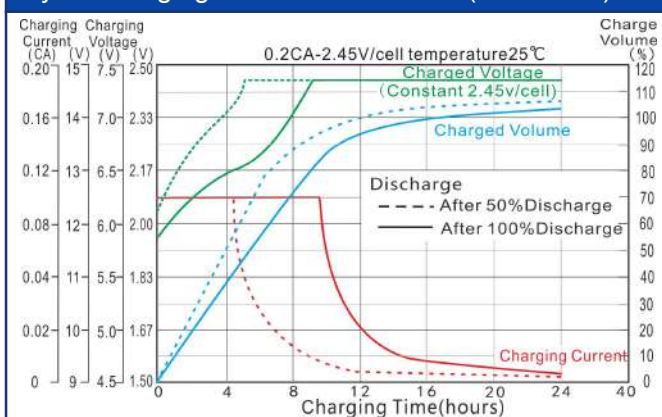
Charging characteristic curve of floating charge (25°C/77°F)



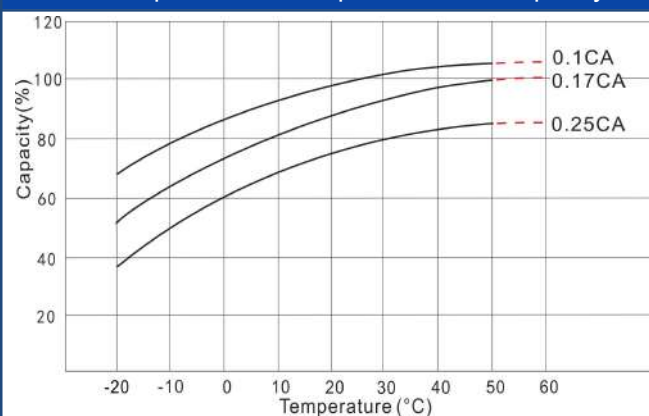
Cycle service life in relation to depth of discharge



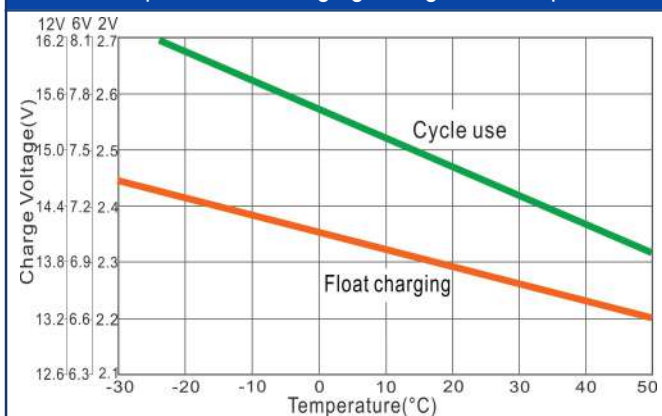
Cyclic charging characteristic curve (25°C/77°F)



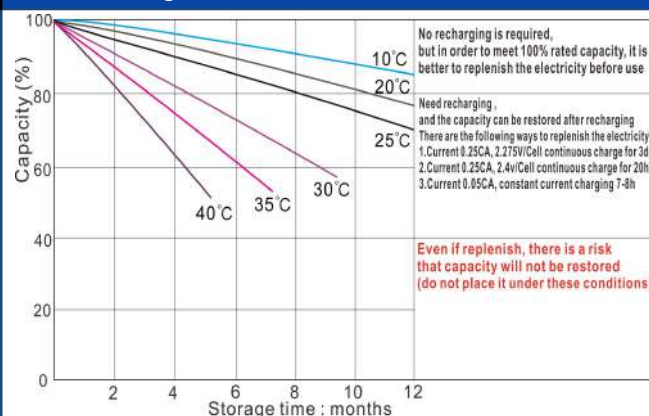
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self discharge characteristics



Temperature vs Float Life

