General Series battery

ACDC GP series valve regulated lead-acid batteries use AGM (Absorbent Glass Fiber Felt) technology and high-quality lead calcium multi-element alloys. Through continuous casting, rolling, and stamping, a compact grain structure is produced to make them more corrosion-resistant. The design of curved grid structure effectively prevents the detachment of active substances.With 6 years floating design life at 25℃, 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
* Alarm system
* Marine equipment
* Medical equipment
* Fire and Security System

General Features

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

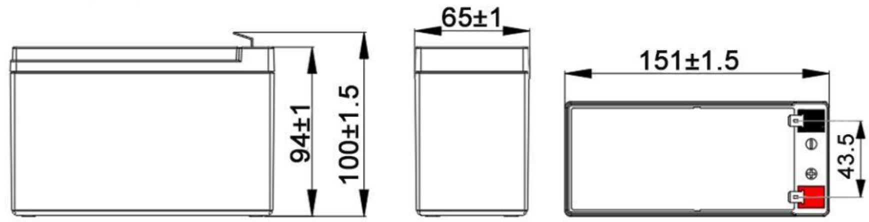
Construction

* 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

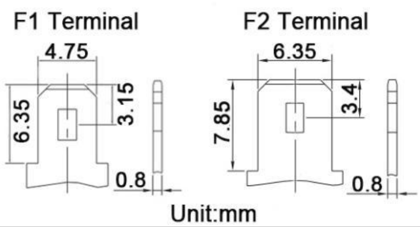
Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Rated capacity (20 Hour rate)		9.0Ah	
Dimension	Length	Width	Height	Total Height
	151mm (5.94 inches)	65mm (2.56 inches)	94mm (3.70 inches)	100mm (3.94 inches)
Approx Weight	2.28kg(5.02 lbs) ± 3%			
Internal Resistance	Full charged at 25℃(77℉):Approx 19.4mΩ			
Maximum Charge Current	2.70A			
Max.discharge current	135A (5Sec.)			
Short-circuit current	370A			
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(0.450A,10.5V)	10 hour rate(0.838A,10.5V)	3 hour rate(2.283A,10.2V)	1 hour rate(5.58A,9.6V)
	9.00Ah	8.38Ah	6.85Ah	5.58Ah
Capacity affected by Temp.(20HR)	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/℃)	

Outer dimension (mm)



Terminal Type

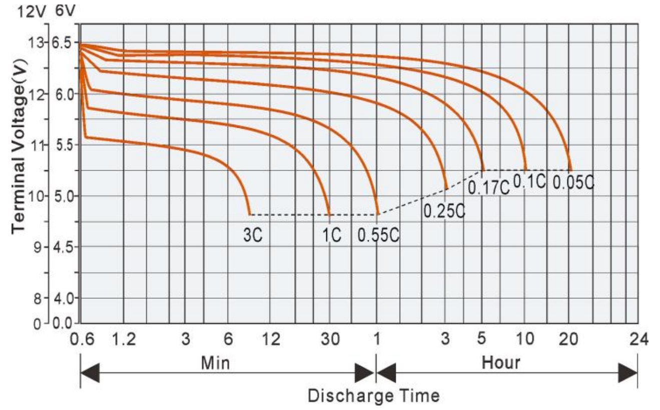


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃(77℉)

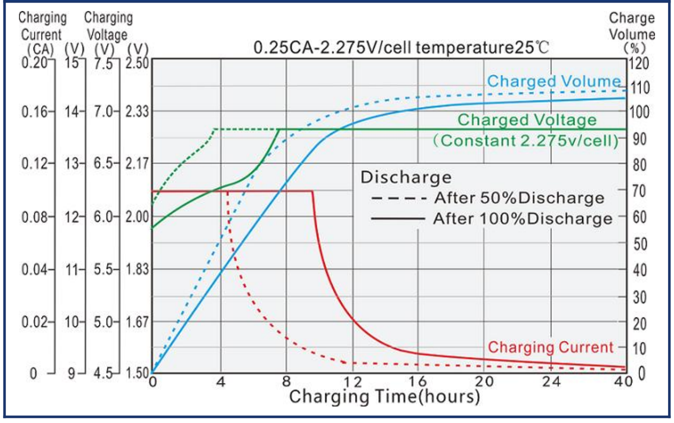
F.V/Time		5min	10min	15min	20min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	28.1	18.50	14.60	11.85	8.60	4.98	2.91	2.125	1.433	0.980	0.810	0.435
	W	54.0	36.04	28.67	23.36	17.04	9.93	5.82	4.262	2.881	1.976	1.637	0.883
1.80V/cell	A	29.8	19.62	15.33	12.32	8.88	5.14	2.99	2.183	1.470	1.000	0.825	0.443
	W	56.6	37.96	29.93	24.17	17.52	10.21	5.96	4.365	2.947	2.011	1.663	0.897
1.75V/cell	A	31.4	20.67	16.01	12.77	9.15	5.29	3.07	2.235	1.502	1.017	0.838	0.450
	W	59.1	39.73	31.12	24.94	17.98	10.47	6.11	4.457	3.004	2.040	1.685	0.909
1.70V/cell	A	32.9	21.67	16.66	13.20	9.41	5.42	3.14	2.283	1.530	1.032	0.850	0.456
	W	61.3	41.40	32.23	25.67	18.43	10.70	6.23	4.542	3.053	2.066	1.705	0.920
1.67V/cell	A	33.8	22.26	16.98	13.45	9.59	5.48	3.17	2.305	1.542	1.038	0.855	0.459
	W	62.7	42.39	32.76	26.10	18.74	10.81	6.28	4.581	3.074	2.076	1.714	0.925
1.60V/cell	A	35.0	23.00	17.54	13.80	9.80	5.58	3.22	2.340	1.560	1.048	0.862	0.463
	W	64.4	43.59	33.72	26.69	19.11	10.98	6.37	4.643	3.105	2.093	1.726	0.932

Note: The above datas are average values. (Edition 2024-11 A2)

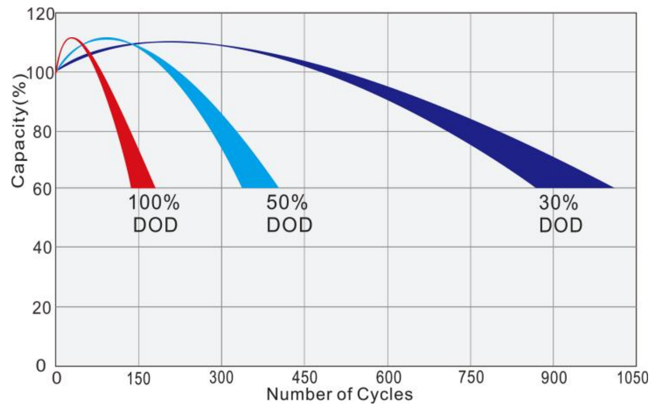
Discharge characteristic curve (25℃/77℉)



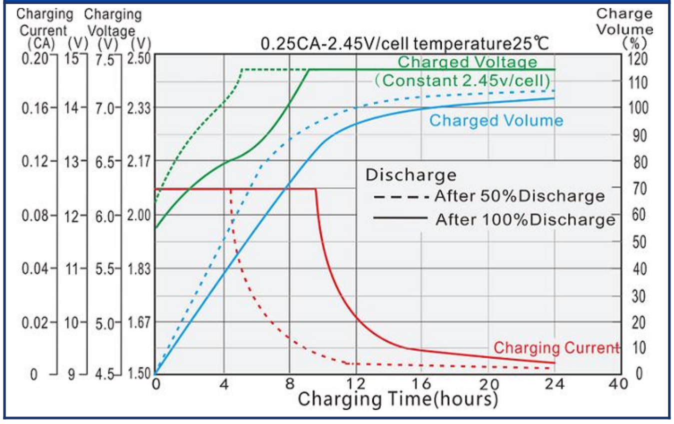
Charging characteristic curve of floating charge(25℃/77℉)



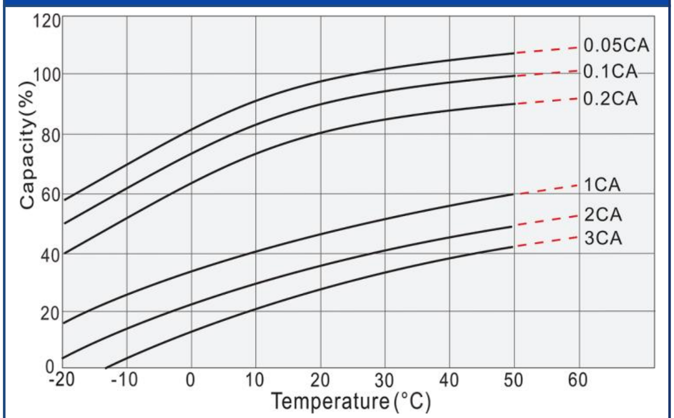
Cycle service life in relation to depth of discharge



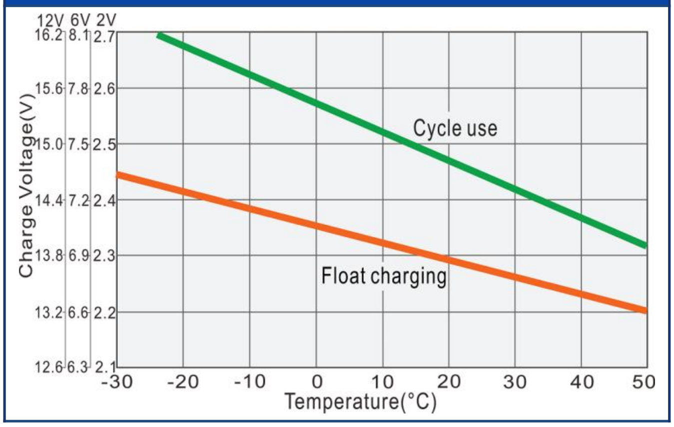
Cyclic charging characteristic curve (25℃/77℉)



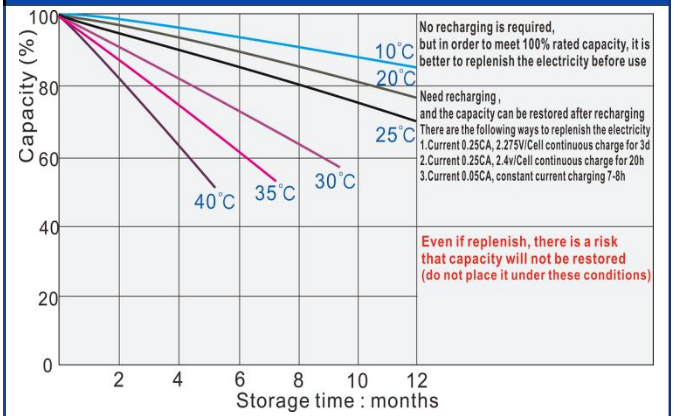
Relationship between temperature and capacity



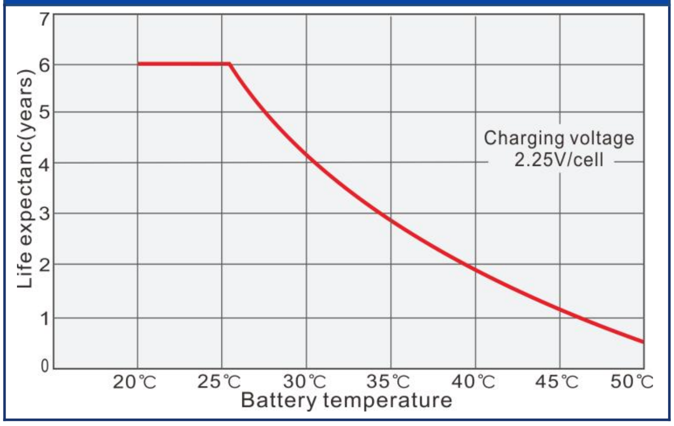
Relationship between charging voltage and temperature



Self discharge characteristics



Temperature vs Float Life



Note: The above datas are average values. (Edition 2024-11 A2)