General Series Battery

SY12012

General Series VRLA batteries are designed with AGM(Absorbent extra power output for common power backup system. General SeriesBatteries are the general purpose batteries with 5 years floating design life at 25℃. Glass Mat) technology,High performance plates and electrolyte togive

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

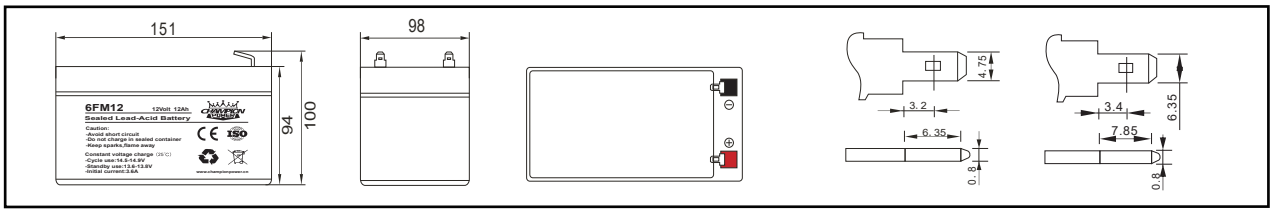
- Positive.....Lead dioxide
- Electrolyte.....Sulfuric acid
- Separator.....Fiber glass
- Container.....ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- Negative.....Lead
- Safety Valve.....EPDR
- Terminal.....Copper

Specification

Battery Model	Nominal Voltage	12V		
	Rated capacity (20Hour rate)	12Ah		
	Cells Per battery	6		
Dimension	Length	Width	Height	Total Height
	151mm	98mm	94mm	100mm
Approx Weight	3.30Kg			
Internal Resistance	Full charged at 25℃(77℉): Approx 17mΩ			
Max.discharge current	180A(5s)			
Floating design life @ 25℃ (77℉)	5 years			
Capacity @ 25℃ (77℉)	20Hour rate(0.6A/10.5V)	10Hour rate(1.08A/10.8V)	5Hour rate(1.73A/10.8V)	1Hour rate(4.62A/10.5V)
	12Ah	10.8Ah	8.67Ah	4.62Ah
Capacity affected by Temp(20 HR)	40℃ (104℉)	25℃ (77℉)	0℃ (32℉)	-15℃(5℉)
	102%	100%	85%	65%
Self Discharge @ 25℃ (77℉)	After 3 months storage	After 6 months storage	After 12 months storage	
	91%	82%	64%	
Charge method @ 25℃ (77℉)	Cycle Use	14.5-14.9V (Initial charging current less than 3.6 A)		
	Float Use	13.6-13.8V		

Outer Dimension(mm)

Terminal Type(mm)



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

F.V / TIME		5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	43.20	28.20	21.00	13.80	7.20	4.20	3.12	2.48	2.11	1.39	1.14	0.61
	W	457.92	299.48	224.70	149.04	78.48	45.78	34.32	27.28	23.16	15.43	12.65	6.89
10.20V	A	39.60	26.50	19.30	13.10	7.44	4.03	3.06	2.40	2.06	1.37	1.12	0.61
	W	431.64	294.15	215.19	147.38	83.70	45.54	34.58	27.24	23.44	15.53	12.66	6.87
10.50V	A	36.73	25.32	18.00	12.70	7.20	3.95	3.00	2.28	2.04	1.35	1.10	0.60
	W	403.98	284.85	203.40	144.78	82.08	45.23	34.35	26.22	23.46	15.53	12.70	6.90
10.80V	A	33.44	24.20	16.80	12.12	6.96	3.85	2.94	2.24	1.95	1.31	1.07	0.59
	W	367.84	275.88	192.36	139.99	80.39	44.47	34.10	26.10	22.72	15.32	12.52	6.82
11.10V	A	28.92	22.80	15.60	11.28	6.60	3.75	2.82	2.20	1.87	1.28	1.05	0.57
	W	326.80	263.34	180.96	131.98	77.22	43.88	33.14	25.96	22.01	15.10	12.39	6.73

ACDC DYNAMICS

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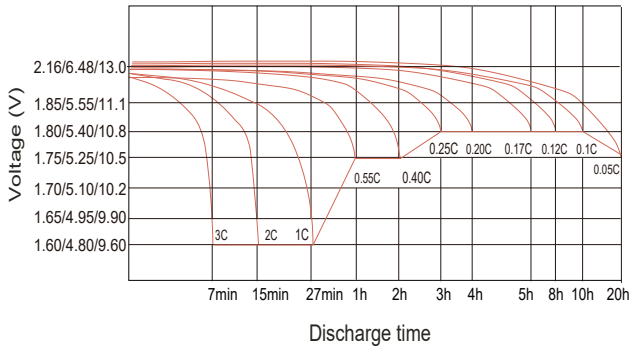
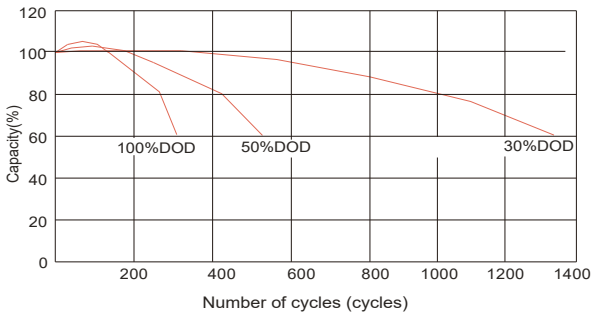
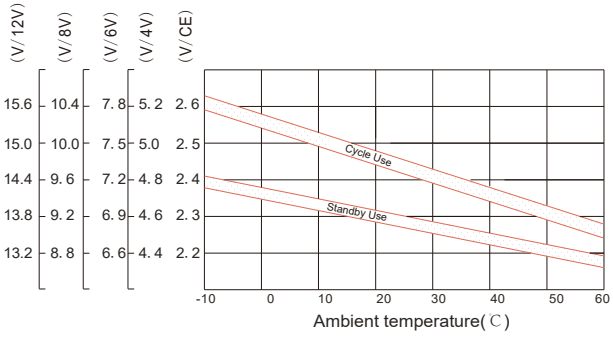
Discharge characterstic Curve



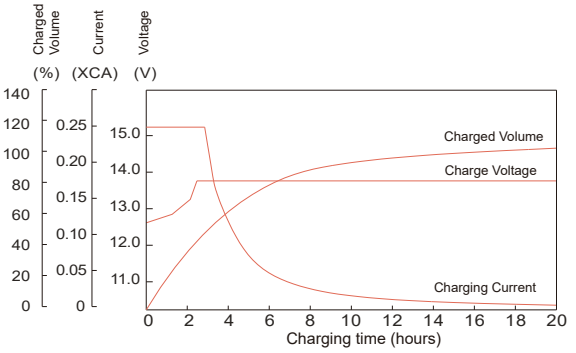
Cycle service life in relation to depth of discharge



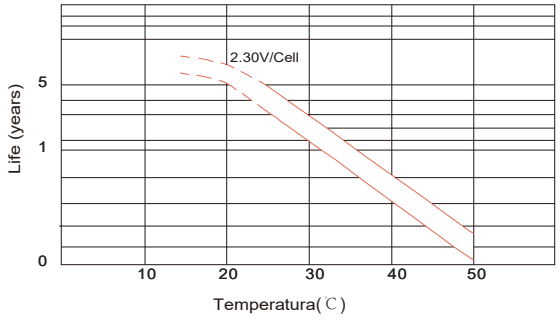
Relationship between charging voltage and temperature



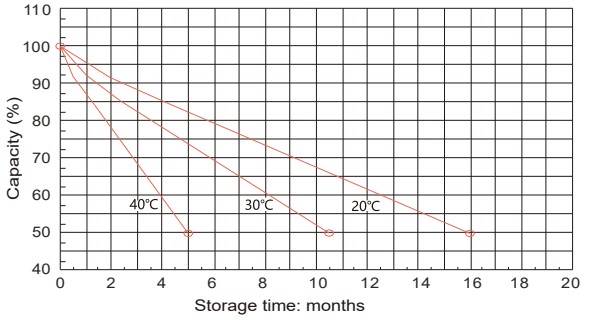
Constant voltage charging characteristic (0.25CA, at 25˚C)



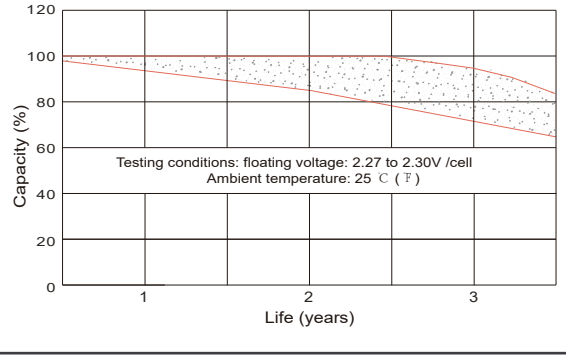
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characterstic for standby use

