Deep Cycle Batteries

SY12035

Deep cycle Series Battery is specially designed for frequent cycling applications.The series battert uses high-tin alloy positive plate, active paste materials and stronger electrolyte,which gives 30% longer life than normal battery. Suitable for solar and wind energy systems.

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

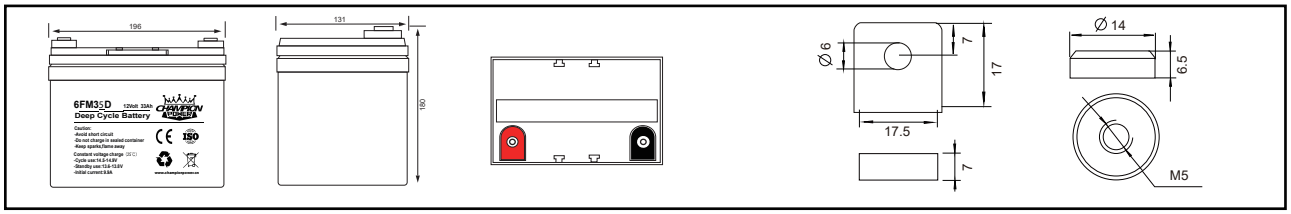
- Positive.....Lead dioxide
- Electrolyte.....Sulfuric acid
- Separator.....Fiber glass
- Negative.....Lead
- Safety Valve.....EPDR
- Terminal.....Copper
- Container.....ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)

Specification

Battery Model	Nominal Voltage	12V		
	Rated capacity (10Hour rate)	35Ah		
	Cells Per battery	6		
Dimension	Length	Width	Height	Total Height
	196mm±1.5	131mm±1.5	155mm±1.5	180mm±2
Approx Weight	9.0Kg			
Internal Resistance	Full charged at 25℃(77℉): Approx 10.5mΩ			
Max.discharge current	330A(5s)			
Floating design life @ 25℃ (77℉)	15 years			
Capacity @ 25℃ (77℉)	10Hour rate(3.5A/10.8V)	5Hourate(5.6A/10.8V)	3Hour rate(8.2A/10.8V)	1Hour rate(18A/10.5V)
	35Ah	28Ah	24.5Ah	18Ah
Capacity affected by Temp(10 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 9.9A)		
	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	118.80	72.60	57.75	37.95	19.80	11.55	8.58	6.93	5.79	3.82	3.63	1.88
	W	1259.28	771.01	617.93	409.86	215.82	125.90	94.38	76.23	63.68	42.43	40.29	21.16
10.20V	A	108.90	72.87	53.07	36.03	20.46	11.08	8.42	6.60	5.68	3.76	3.47	1.85
	W	1187.01	808.91	591.79	405.28	230.18	125.23	95.09	74.91	64.45	42.70	39.33	20.97
10.50V	A	100.99	69.63	49.50	34.92	19.80	10.86	8.25	6.27	5.61	3.71	3.40	1.82
	W	1110.93	783.34	559.35	398.14	225.72	124.38	94.46	72.11	64.52	42.69	39.09	20.99
10.80V	A	91.96	66.55	46.20	33.33	19.14	10.59	8.09	6.16	5.36	3.62	3.30	1.80
	W	1011.56	758.67	528.99	384.96	221.07	122.29	93.79	71.76	62.47	42.13	38.45	20.99
11.10V	A	79.53	62.70	42.90	31.02	18.15	10.31	7.76	6.05	5.13	3.52	3.22	1.78
	W	898.69	724.19	497.64	362.93	212.36	120.66	91.12	71.39	60.52	41.54	37.97	21.03

ACDC DYNAMICS

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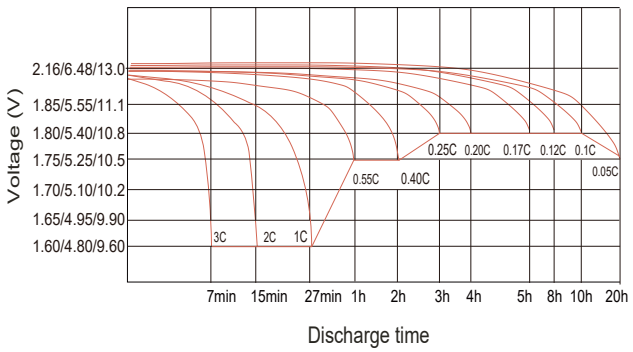
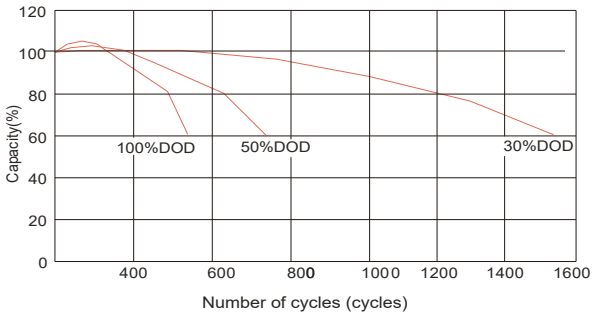
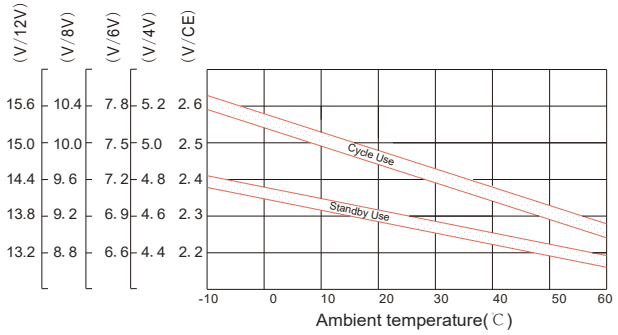
Discharge characterstic Curve



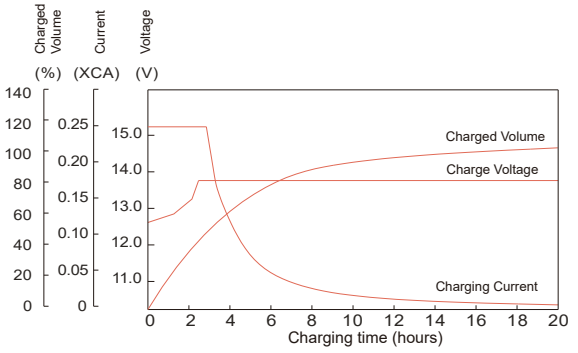
Cycle service life in relation to depth of discharge



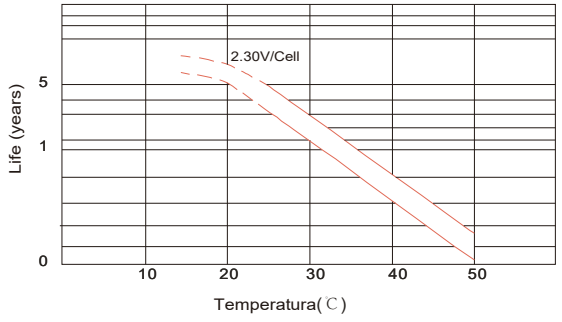
Relationship between charging voltage and temperature



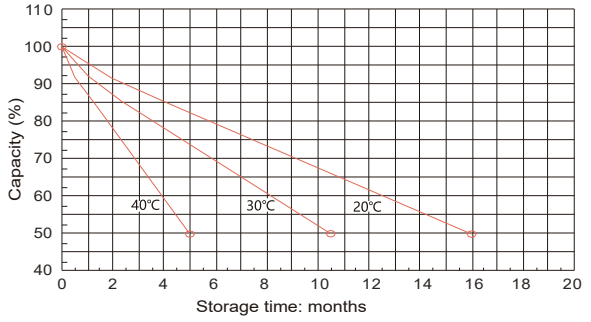
Constant voltage charging characteristic (0.25CA, at 25˚C)



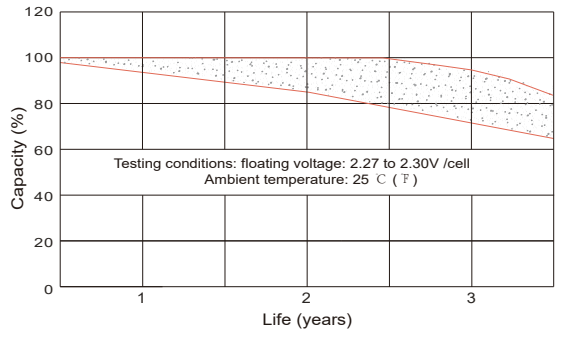
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characterstic for standby use

