

Deep Cycle Gel Type Batteries

12V 90AH - M6/F8 Terminal

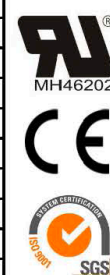
Model: SG4573



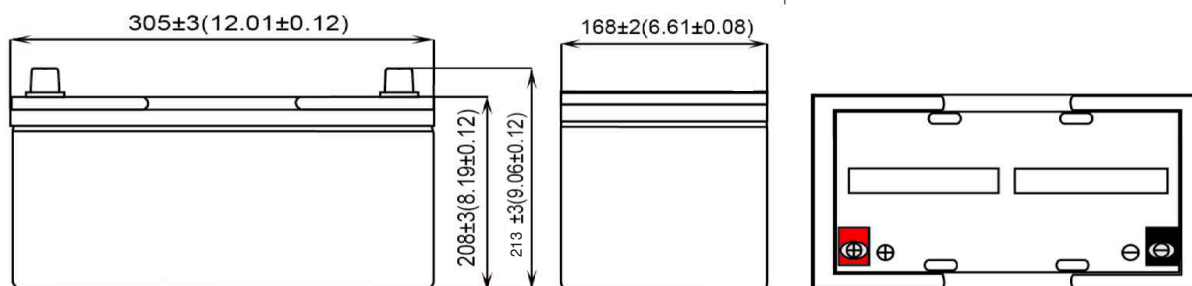
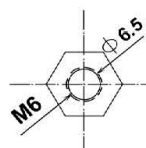
Deep cycle batteries are designed for regular discharge. These are suitable for every day use in golf buggies, wheelchairs, forklifts and remote power applications. This 12V 90Ah sealed lead acid (SLA) battery is a compact battery for powering 12V equipment. Fitted with M6 bolt and nut terminals, these batteries are easily user replaced in most equipment they are used in. Cells are fully sealed to prevent any leakage of electrolyte.

Our range of Powerhouse SLA batteries are from a quality supplier and are graded for use in commercial systems. We have found the quality of SLA batteries varies considerably between suppliers and often cheaper units have a shorter life span.

Cell per unit	6	Ambient temperature	
Nominal Voltage (V)	12	Charge	0°C (32°F) to 40°C (104°F)
Nominal Capacity (Ah)	100Ah @ 20hour rate F.V.(1.75/Cell)	Discharge	-15°C (5°F) to 50°C (122°F)
Weight	Approx. 29.0 kg(63.93Lbs.)	Storage	-15°C (5°F) to 40°C (104°F)
Internal Resistance (1KHz)	≤5.0mΩ	Max charge Current	
Max Discharge Current (5s)	1080A (5s)		Max charge current : 30A
Battery Life :	10 – 12 years(standby)	Cycle use :	Charge voltage: 14.4V to 15.0V
Terminal Type	M6/F8	Stand by :	Charge voltage: 13.5V to 13.8V
Container Material	ABS(Option : 94-HB & 94V-0 flame retardant case)		



DIMENSIONS	Length	Width	Height	Total Height
Unit: mm	305±3	168±2	208±3	213 ±3
Unit: inch	12.01±0.12	6.61±0.08	8.19±0.12	9.06±0.12



Constant current discharge characteristics Unit:A(25°C 77°F)										
F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	329.00	180.00	111.70	68.70	33.80	28.20	16.90	11.20	9.47	4.91
1.67V	312.40	177.90	110.00	67.50	32.70	27.80	16.30	11.00	9.37	4.88
1.70V	297.00	172.30	109.20	67.20	31.60	27.70	15.90	10.90	9.18	4.82
1.75V	270.20	168.40	108.10	65.80	30.60	27.10	15.50	10.70	9.09	4.73
1.80V	246.50	160.90	105.00	64.80	29.50	27.10	15.10	10.50	9.00	4.68

Constant power discharge characteristics Unit:W(25°C 77°F)										
F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	3600.00	2130.0	1300.0	811.8	384.60	296.40	220.80	151.70	124.77	71.29
1.67V	3340.00	2034.9	1270.9	800.8	373.80	288.60	218.50	150.10	123.29	70.65
1.70V	3120.00	1947.6	1220.9	787.2	366.00	278.40	215.30	148.10	121.55	69.94
1.75V	2900.00	1851.6	1170.9	770.6	352.80	271.20	210.50	146.00	119.71	69.18
1.80V	2612.00	1725.1	1154.1	751.0	341.40	267.60	207.50	143.50	106.80	67.56

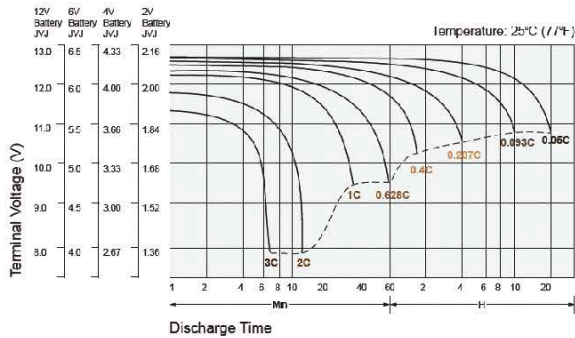
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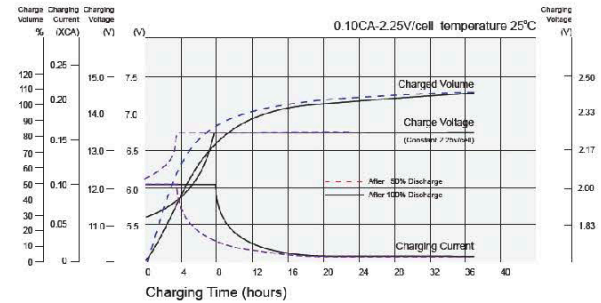
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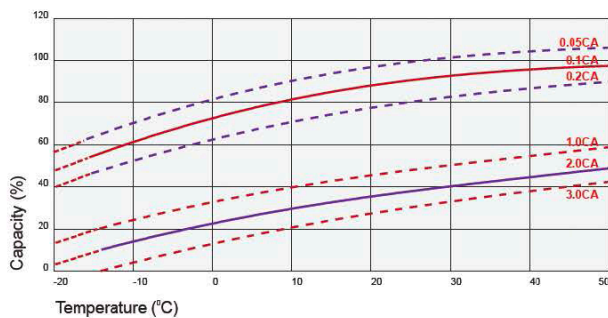
Battery Discharge Characteristics (25°C/77°F)



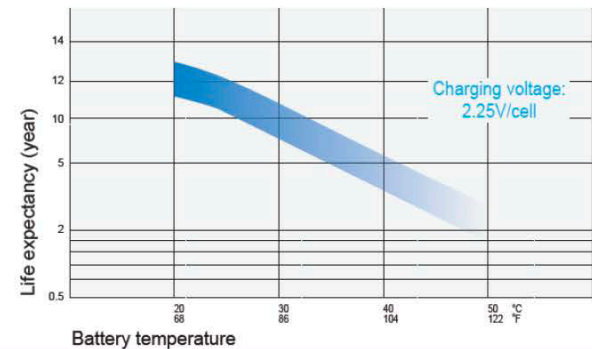
Battery Charge Characteristic for standby use



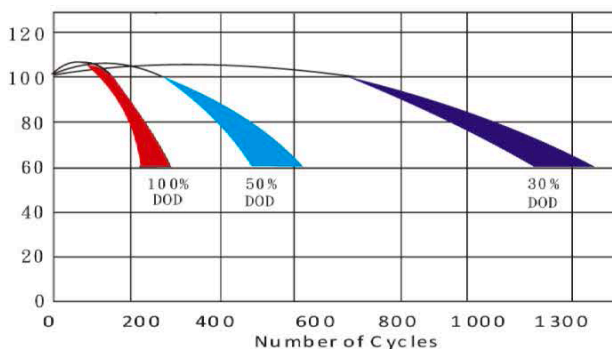
Temperature Effects in Relation to Battery Capacity



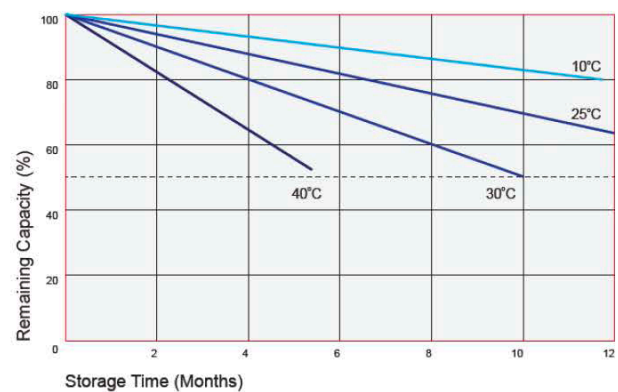
Temperature Effects on Long Term Float Life



Cycle Service Life



Self Discharge Characteristics



Charging Procedures

Application	Charge Voltage(V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.25C
Standby	25°C(77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75	1.70	1.65	1.60
Discharge Current (A)	0.2C~(A)	0.2C~(A)	0.5C~(A)	(A)>1.0C
Discharge Current (A)	<0.5C	<0.5C	<1.0C	<1.0C