

Deep Cycle Gel Type Batteries

12V 40AH - M6/F8 Terminal

Model: SG4563

Powerhouse
BATTERIES



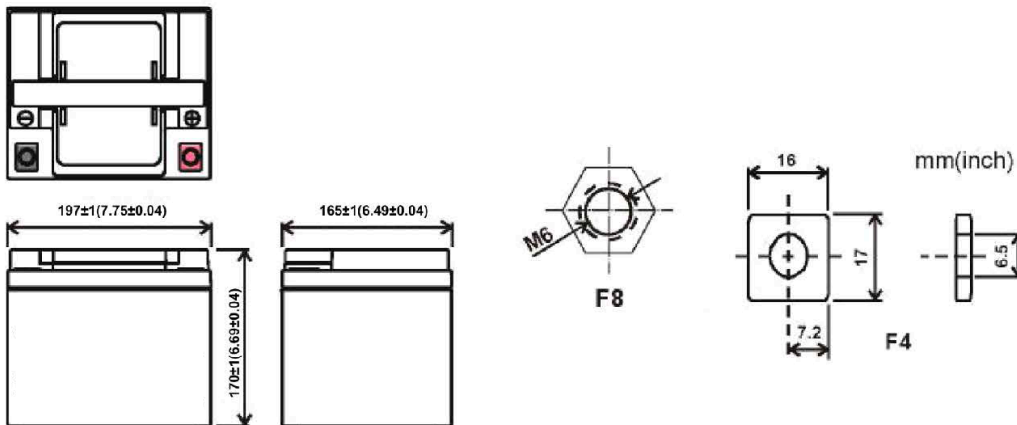
Deep cycle batteries are designed for regular discharge. These are suitable for every day use in golf buggies, wheelchairs, forklifts and remote power applications. This 12V 40Ah sealed lead acid (SLA) battery is a compact battery for powering 12V equipment. Fitted with M6 bolt and nut terminals, these 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)	40Ah@ 20hour rate F.V(1.75/cell)	Discharge	-15°C (5°F) to 50°C (122°F)
Weight	Approx. 14.20kg(28.66Lbs.)	Storage	-15°C (5°F) to 40°C (104°F)
Internal Resistance (1KHz)	8mΩ	Max charge Current	
Max Discharge Current (5s)	480A		Max charge current : 12A
Battery Life :	6 – 9 years(standby)	Cycle use :	Charge voltage: 14.4 to 15.0V
Terminal Type	M6/F8	Stand by :	Charge voltage: 13.50 to 13.80V
Container Material	ABS(Option : 94-HB & 94V-0 flame retardant case)		



DIMENSIONS	Length	Width	Height	Total Height
Unit: mm	197±1	165±1	170±1	170±1
Unit: inch	7.75±0.04	6.49±0.04	6.69±0.04	6.69±0.04



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	171.0	81.0	40.9	24.6	13.9	10.10	7.13	5.35	3.82	2.14
1.67V	168.0	75.0	40.0	23.5	13.8	10.00	7.02	5.25	3.77	2.12
1.70V	157.0	72.0	38.9	22.7	13.5	9.62	6.98	5.10	3.73	2.07
1.75V	140.0	66.0	34.9	23.2	13.1	9.27	6.84	5.00	3.45	2.03
1.80V	103.0	61.2	30.7	22.5	12.6	9.17	6.68	4.90	3.27	1.95

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	1,951	927.0	494.0	272.9	168.0	126.3	87.2	50.0	40.22	21.19
1.67V	1,919	913.0	487.0	270.4	167.0	125.7	86.6	49.6	40.20	21.19
1.70V	1,795	861.0	459.0	266.9	164.0	120.0	85.2	49.0	40.10	21.08
1.75V	1,603	780.0	416.0	262.4	161.0	117.0	83.6	48.4	39.80	21.08
1.80V	1,337	663.0	354.0	254.5	155.0	113.0	81.4	47.6	39.30	20.69

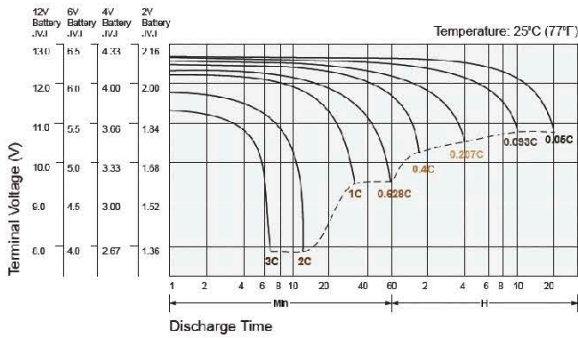
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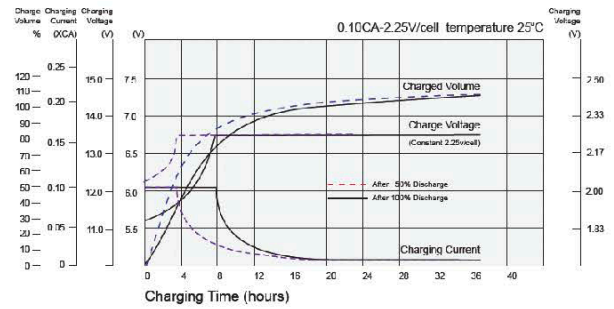
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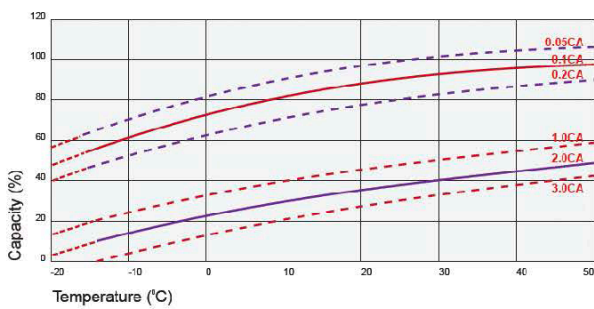
Battery Discharge Characteristics (25°C/77°F)



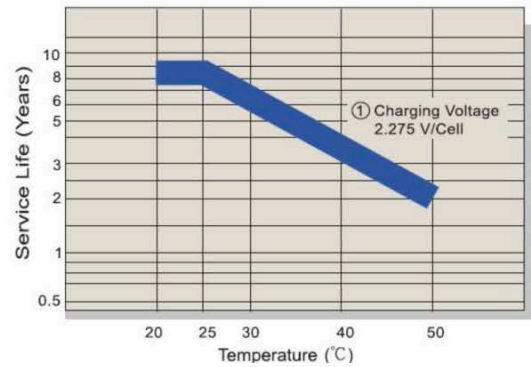
Battery Charge Characteristic for standby use



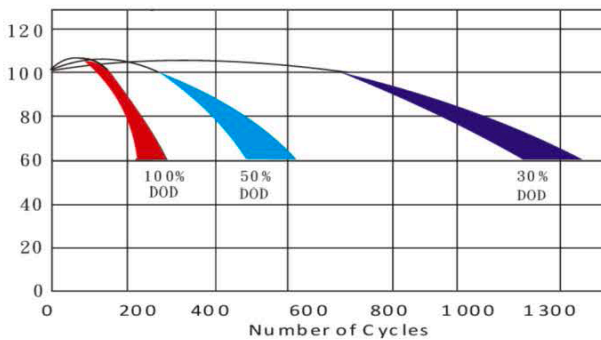
Temperature Effects in Relation to Battery Capacity



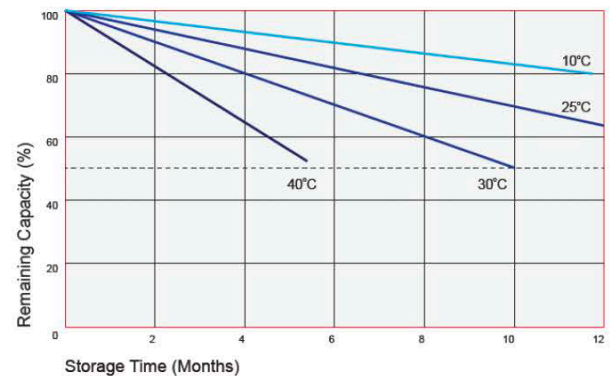
Temperature Effects on Long Term Float Life



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
		<0.5C	<1.0C	