

SPG 12V - 200Ah | VRLA GEL Battery

SPG are sealed valve-regulated lead acid recombinant batteries that are non-spillable and maintenance-free. Although initially more expensive to purchase than AGM they offer a lower total cost to own over the life of the battery. When it comes to performance and life span the SPG batteries outperform other technologies and provide the greatest value for your stand-by application or cycling needs.

Technical Features

- Micro millimeter SiO₂ and H₂SO₄ gelled electrolyte technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.
- Case and cover available in both standard and flame retardant ABS.

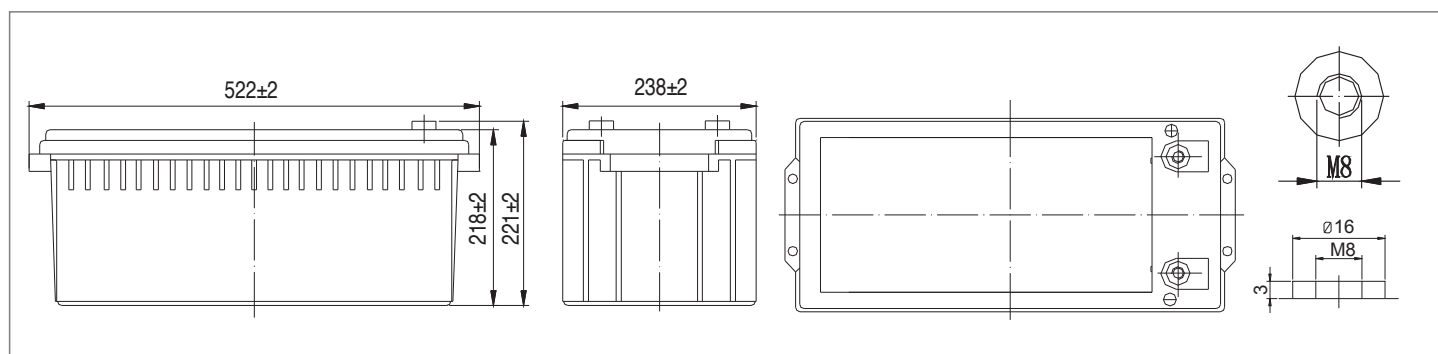
Specifications

Nominal Voltage	12 V		
Number of cells	6		
Design Life	12 years		
Dimensions	Length	522 mm	
	Width	238 mm	
	Height	218 mm	
	Total Height	221 mm	
Approx. Weight	60.5 kg		
Nominal Capacity (25°C)	20 hours rate (10.3 A, 10.8 V)	206 Ah	
	10 hours rate (20.0 A, 10.8 V)	200 Ah	
	5 hours rate (33.2 A, 10.5 V)	166 Ah	
	1 hour rate (120.0 A, 9.6 V)	120 Ah	
Max. Discharge Current (25°C)	1500 A (5s)		
Short Circuit Current	4050 A		
Internal Resistance	3.3 mOhms		
Fully Charged battery (25°C)	3.3 mOhms		
Self-Discharge	3% of capacity declined per month at 25°C (average)		
Operating Temperature Range	Discharge	:-15~50°C	
	Charge	:-10~50°C	
Max. Charging Current	Storage	:-20~50°C	
	40.0 A		
Charging Characteristics (25°C)	Float Charging Voltage	13.50 V to 13.80 V	
	Temperature Compensation	-18 mV/°C	
	Cyclic Charging Voltage	14.40 V to 14.70 V	
	Temperature Compensation	-30 mV/°C	

Battery Construction

Component	Positive Plate	Negative Plate	Container	Cover	Safety Valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Gelled acid

Dimensions



Constant Current Discharge (Amperes) at 25°C

End Voltage (Volts/Cell)	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60 V	304	192	120	72.1	49.0	38.8	33.9	24.1	20.4	10.5
1.65 V	297	188	118	71.6	48.7	38.5	33.7	23.9	20.3	10.5
1.70 V	286	182	115	71.0	48.3	38.3	33.4	23.8	20.3	10.4
1.75 V	276	178	113	69.9	48.0	38.0	33.2	23.6	20.1	10.4
1.80 V	261	171	109	68.2	46.6	36.9	32.2	22.9	20.0	10.3

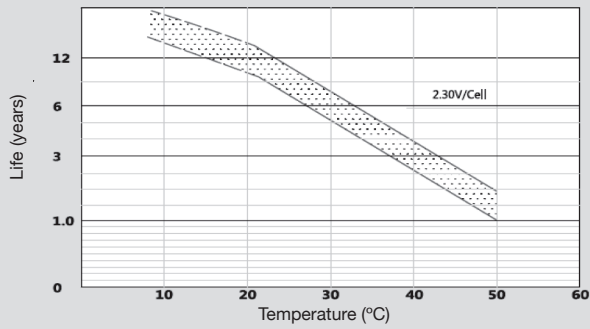
Constant Power Discharge (Watts) at 25°C

End Voltage (Volts/Cell)	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60 V	3338	2154	1368	835	576	456	400	286	243	126
1.65 V	3258	2111	1347	830	572	453	398	284	243	126
1.70 V	3138	2047	1313	822	568	450	395	282	242	125
1.75 V	3031	1997	1287	810	564	447	392	280	240	124
1.80 V	2871	1924	1248	789	548	433	381	272	239	124

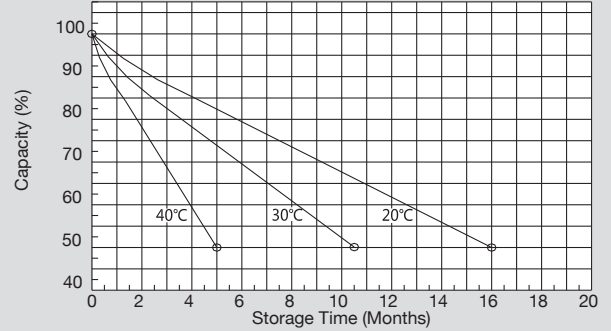
Note: The above characteristics data can be obtained within three charge/discharge cycles.

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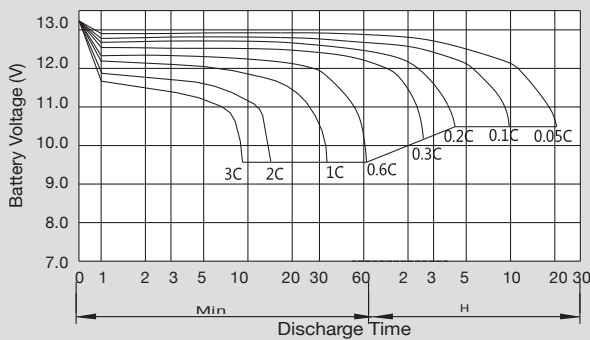
Temperature Effects on Float Life



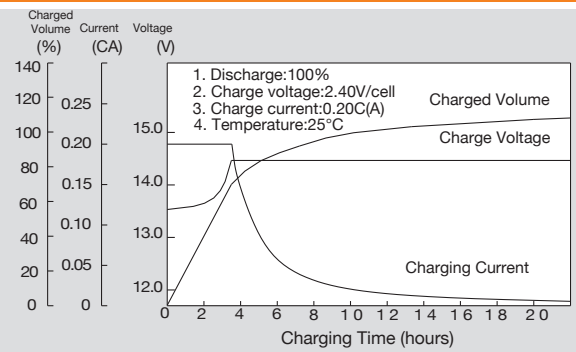
Self Discharge Characteristics



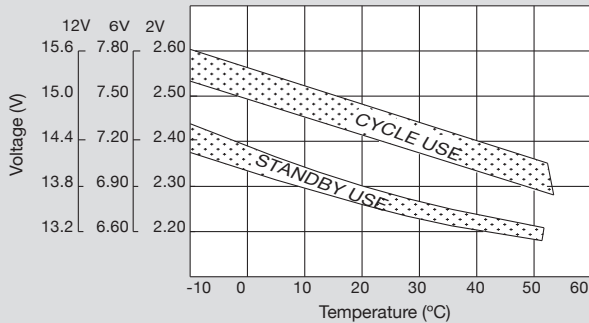
Discharge Characteristics (25°C)



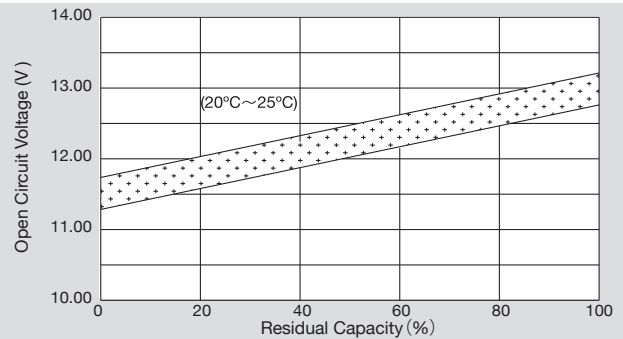
Charging Characteristics (25°C)



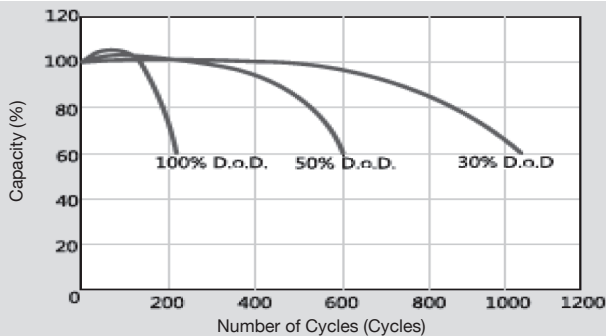
Relationship Between Charging Voltage and Temperature



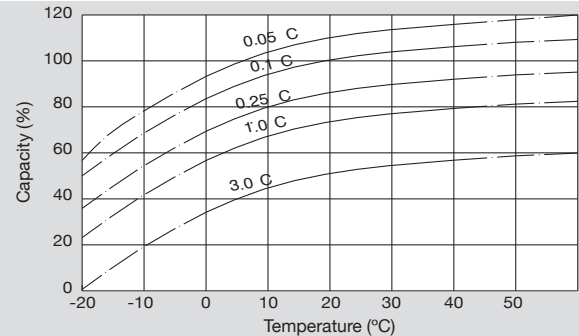
Relationship Between OCV and Residual Capacity (25°C)



Cycle Service Life in Relation to Depth of Discharge



Temperature Effects on Capacity



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