

SPG 12V - 150Ah | 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.

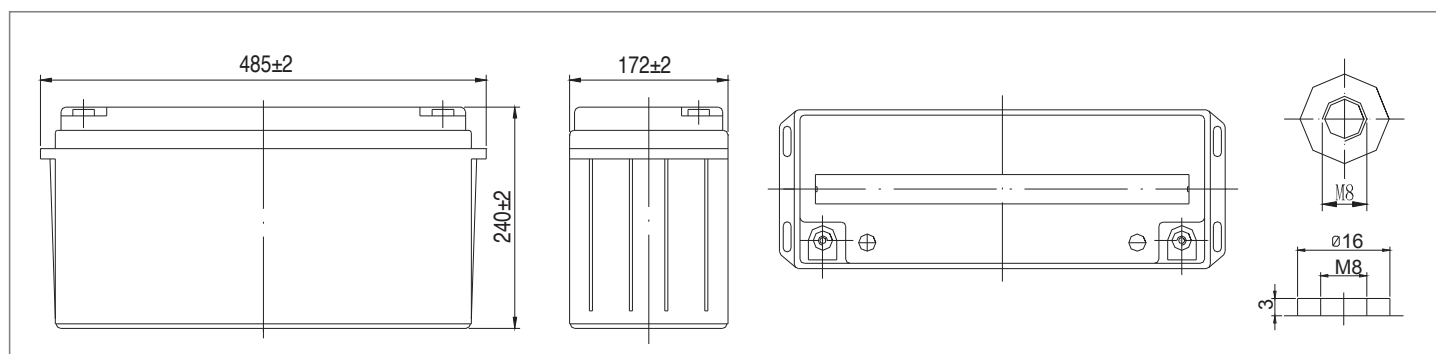
Specifications

Nominal Voltage	12 V	
Number of cells	6	
Design Life	12 years	
Dimensions	Length	485 mm
	Width	172 mm
	Height	240 mm
	Total Height	240 mm
Approx. Weight	43 kg	
Nominal Capacity (25°C)	20 hours rate (7.73 A, 10.8 V)	154.6 Ah
	10 hours rate (15.00 A, 10.8 V)	150.0 Ah
	5 hours rate (24.90 A, 10.5 V)	124.5 Ah
	1 hour rate (90.00 A, 9.6 V)	90.0 Ah
Max. Discharge Current (25°C)	1200 A (5s)	
Short Circuit Current	3480 A	
Internal Resistance	3.9 mOhms	
Fully Charged battery (25°C)	3.9 mOhms	
Self-Discharge	3% of capacity declined per month at 25°C (average)	
Operating Temperature Range	Discharge	-15~50°C
	Charge	-10~50°C
	Storage	-20~50°C
Max. Charging Current	30.0 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	228	144	90.0	54.0	36.7	29.1	25.4	18.1	15.3	7.86
1.65 V	223	141	88.7	53.7	36.5	28.9	25.2	17.9	15.2	7.85
1.70 V	214	137	86.4	53.3	36.3	28.7	25.1	17.8	15.2	7.83
1.75 V	207	133	84.7	52.5	36.0	28.5	24.9	17.7	15.1	7.78
1.80 V	196	129	82.1	51.1	34.9	27.6	24.2	17.2	15.0	7.73

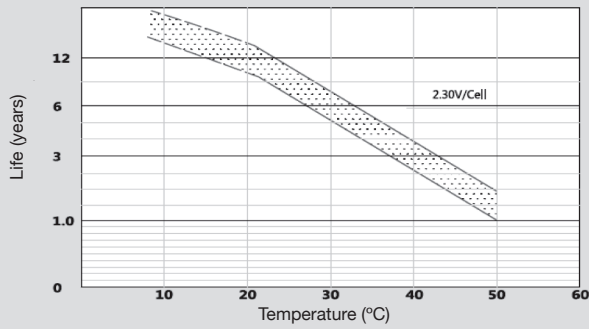
Constant Power Discharge (Watts) at 25°C

End Voltage (Volts/Cell)	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60 V	2503	1616	1026	626	432	342	300	214	182	94.4
1.65 V	2443	1583	1011	622	429	340	298	213	182	94.2
1.70 V	2353	1535	985	617	426	338	296	212	181	93.9
1.75 V	2273	1498	965	607	423	335	294	210	180	93.3
1.80 V	2153	1443	936	592	411	325	285	204	179	92.7

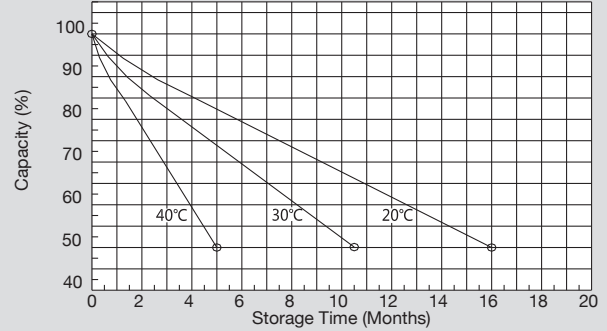
Note: The above characteristics data can be obtained within three charge/discharge cycles.

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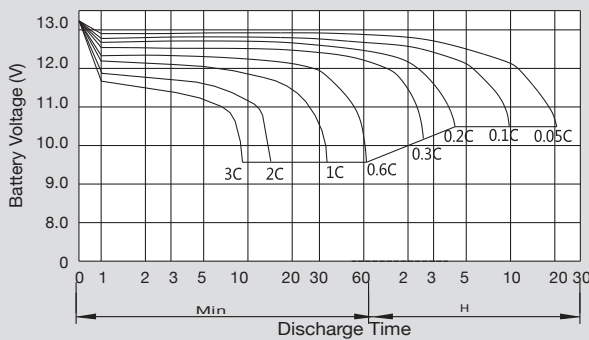
Temperature Effects on Float Life



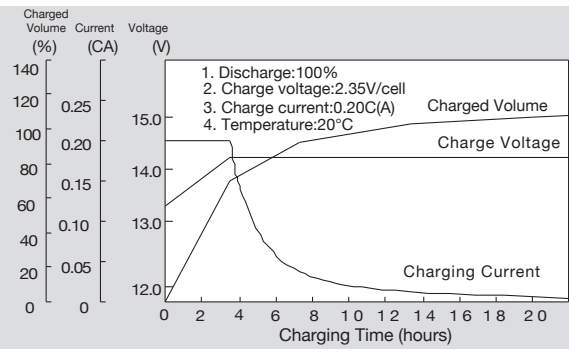
Self Discharge Characteristics



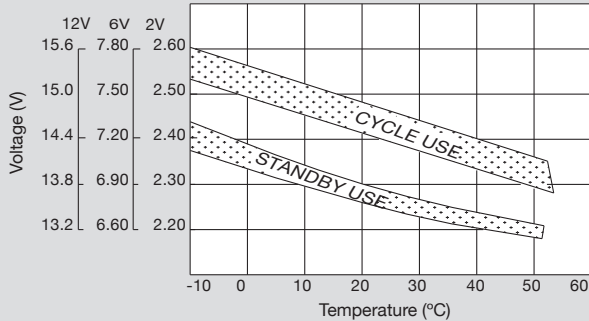
Discharge Characteristics (25°C)



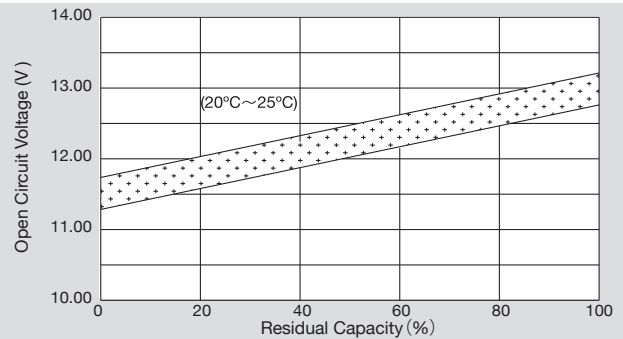
Charging Characteristics (25°C)



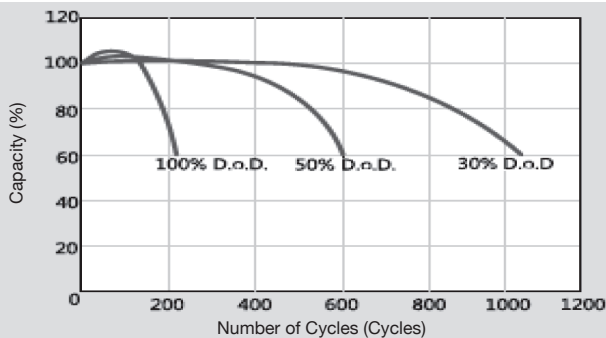
Relationship Between Charging Voltage and Temperature



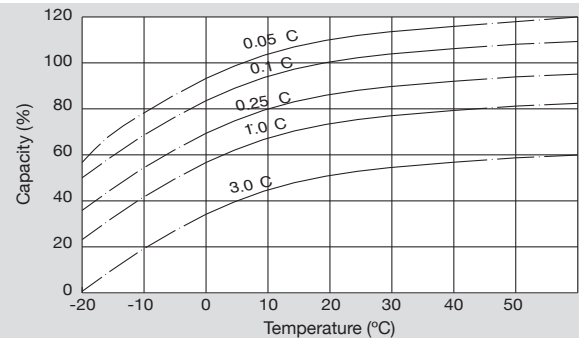
Relationship Between OCV and Residual Capacity (25°C)



Cycle Service Life in Relation to Depth of Discharge



Temperature Effects on Capacity



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