

SPB 12V - 150Ah | VRLA Battery



Applications

- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency backup power supplies
- Electronic apparatus and equipment
- Communication power supplies
- DC power supplies
- Auto control system

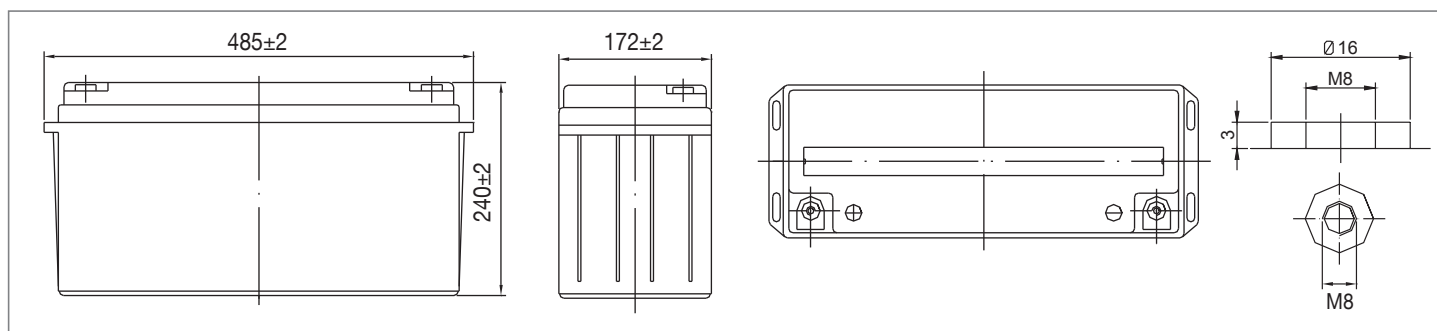
Specifications

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	45.5 kg	
Nominal Capacity (25°C)	20 hours rate (7.88 A, 10.8 V)	157.6 Ah
	10 hours rate (15.00 A, 10.8 V)	150.0 Ah
	5 hours rate (26.30 A, 10.5 V)	131.5 Ah
	1 hour rate (89.30 A, 10.2 V)	89.3 Ah
Max. Discharge Current (25°C)	1200 A (5s)	
Internal Resistance	3.5 mOhms	
Fully Charged battery (25°C)	3.5 mOhms	
Self-Discharge	3% of capacity declined per month at 25°C (average)	
Operating Temperature Range	Discharge	-15°C~50°C
	Charge	-10°C~50°C
	Storage	-20°C~50°C
Short Circuit Current	3450 A	
Charging Characteristics (25°C)	Boost charging voltage	2.40-2.45 Vpc
	Maximum charging current	45.0 A
	Temperature compensation	-30 mV/°C
	Float charging voltage	2.25-2.30 Vpc
	Temperature compensation	-18 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	Sulfuric acid

Dimensions



Constant Current Discharge (Amperes) at 25°C

End Voltage (Volts/Cell)	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60 V	243	147	93.0	54.8	38.3	31.4	26.8	23.4	18.4	15.3	8.02
1.65 V	237	144	91.6	54.5	38.0	31.2	26.6	23.3	18.3	15.2	8.00
1.70 V	228	140	89.3	54.0	37.8	31.0	26.4	23.1	18.1	15.2	7.98
1.75 V	220	136	87.5	53.2	37.5	30.8	26.3	23.0	18.0	15.1	7.93
1.80 V	209	131	84.8	51.8	36.4	29.8	25.5	22.3	17.5	15.0	7.88

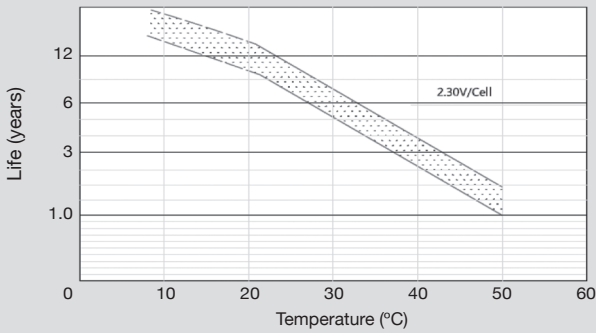
Constant Power Discharge (Watts) at 25°C

End Voltage (Volts/Cell)	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60 V	2663	1649	1060	635	450	369	316	277	218	182	96.2
1.65 V	2599	1616	1044	631	447	367	315	275	217	182	96.0
1.70 V	2503	1567	1018	625	444	364	312	273	215	181	95.7
1.75 V	2418	1529	998	616	441	362	310	271	214	180	95.2
1.80 V	2290	1473	967	600	428	351	301	263	207	179	94.5

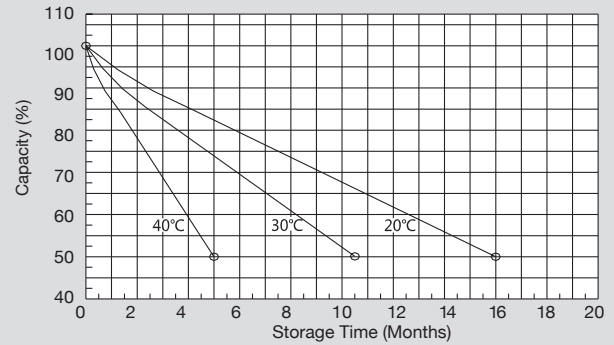
(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

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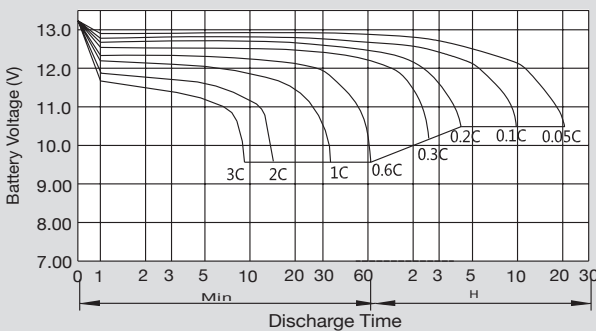
Temperature Effects on Float Life



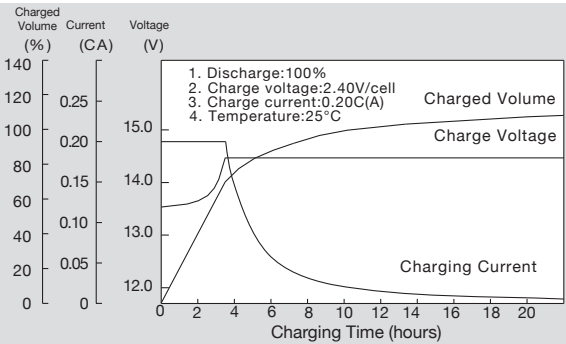
Self Discharge Characteristics



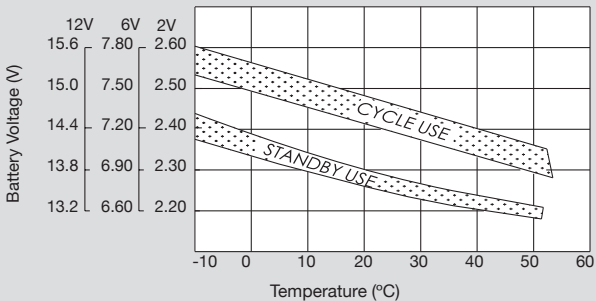
Discharge Characteristics (25°C)



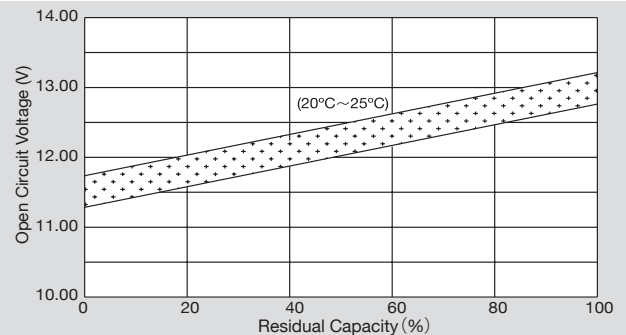
Charging Characteristic (25°C)



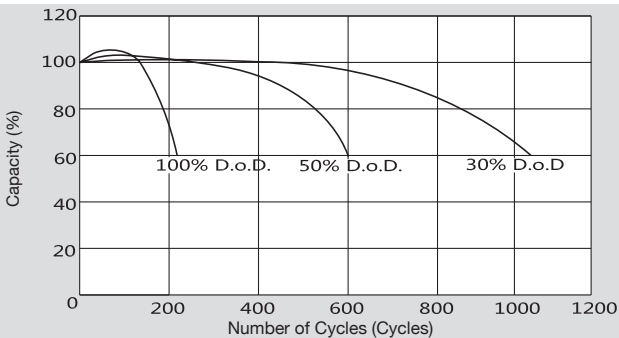
Relationship Between Charging Voltage and Temperature



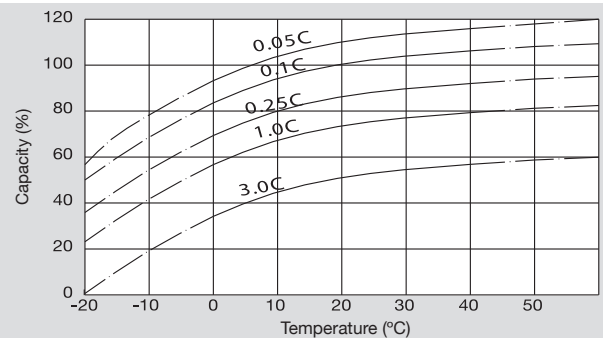
Relationship Between OCV and Residual Capacity (25°C)



Cycle Service Life in Relation to Depth of Discharge



Temperature Effects on Capacity



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