

# SPB 12V - 75Ah | 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

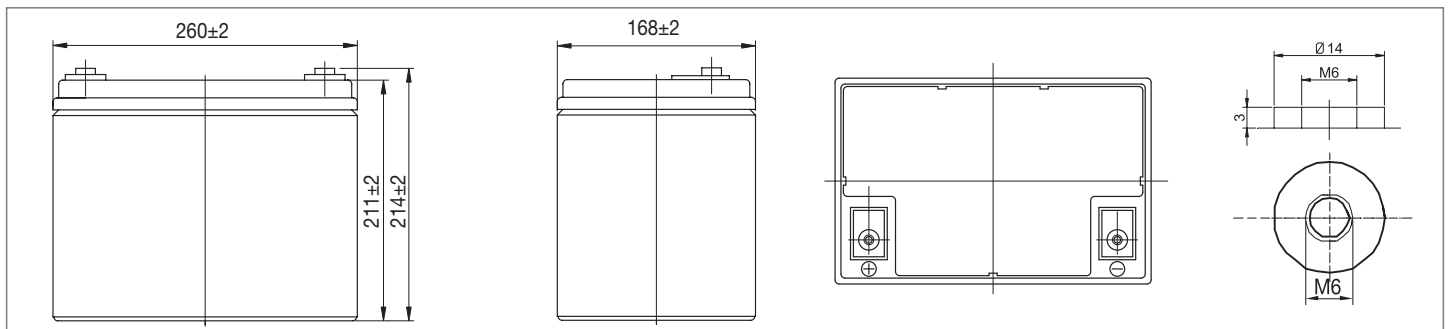
## Specifications

Nominal Voltage	12 V	
Number of cells	6	
Design Life	12 years	
Dimensions	Length	260 mm
	Width	168 mm
	Height	211 mm
	Total Height	214 mm
Approx. Weight	24.0 kg	
Nominal Capacity (25°C)	20 hours rate (3.78 A, 10.8 V)	75.6 Ah
	10 hours rate (7.50 A, 10.8 V)	75.0 Ah
	5 hours rate (12.60 A, 10.5 V)	63.0 Ah
	1 hour rate (42.90 A, 10.2 V)	42.9 Ah
Max. Discharge Current (25°C)	750 A (5s)	
Internal Resistance	6.5 mOhms	
Fully Charged battery (25°C)	3% of capacity declined per month at 25°C (average)	
Self-Discharge	Discharge	: -15°C~50°C
	Charge	: -10°C~50°C
	Storage	: -20°C~50°C
Operating Temperature Range	2020 A	
Short Circuit Current	Boost charging voltage	2.40-2.45 Vpc
	Maximum charging current	22.5 A
	Temperature compensation	-30 mV/°C
	Float charging voltage	2.25-2.30 Vpc
	Temperature compensation	-18 mV/°C
	Charging Characteristics (25°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)	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60 V	147	116	70.6	44.6	26.3	18.4	15.1	12.9	8.81	7.64	3.85
1.65 V	142	114	69.1	44.0	26.2	18.3	15.0	12.8	8.76	7.62	3.84
1.70 V	136	109	67.0	42.9	25.9	18.1	14.9	12.7	8.70	7.60	3.83
1.75 V	131	106	65.4	42.0	25.5	18.0	14.8	12.6	8.64	7.55	3.81
1.80 V	123	100	63.0	40.7	24.9	17.5	14.3	12.2	8.38	7.50	3.78

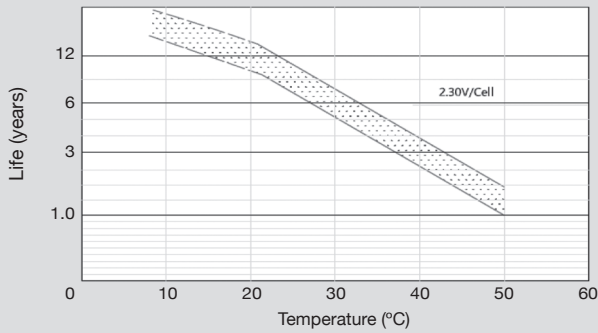
## Constant Power Discharge (Watts) at 25°C

End Voltage (Volts/Cell)	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60 V	1584	1278	792	509	305	216	177	152	105	91.2	46.2
1.65 V	1536	1248	776	501	303	215	176	151	104	91.0	46.1
1.70 V	1473	1202	752	489	300	213	175	150	103	90.7	45.9
1.75 V	1410	1161	734	479	296	212	174	149	103	90.2	45.7
1.80 V	1331	1099	707	464	288	205	168	144	100	89.6	45.4

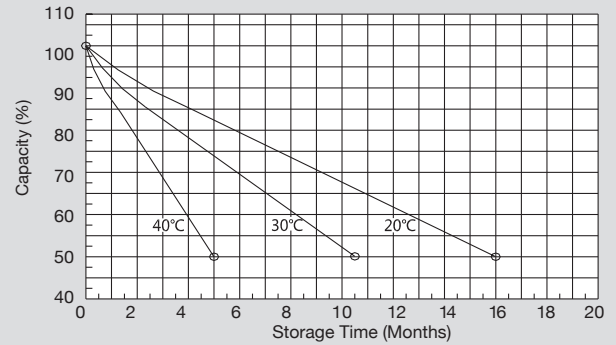
(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

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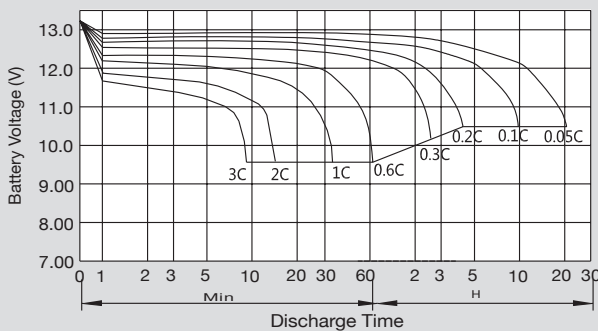
## Temperature Effects on Float Life



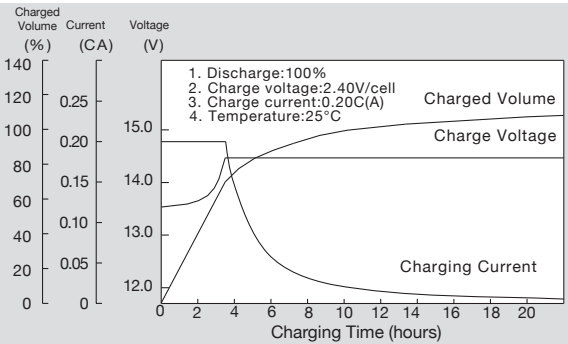
## Self Discharge Characteristics



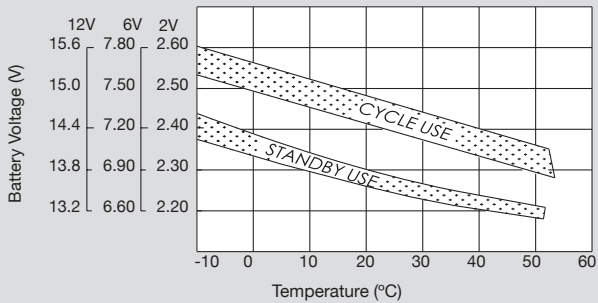
## Discharge Characteristics (25°C)



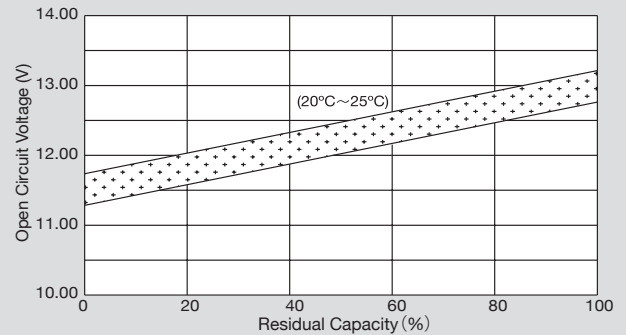
## Charging Characteristic (25°C)



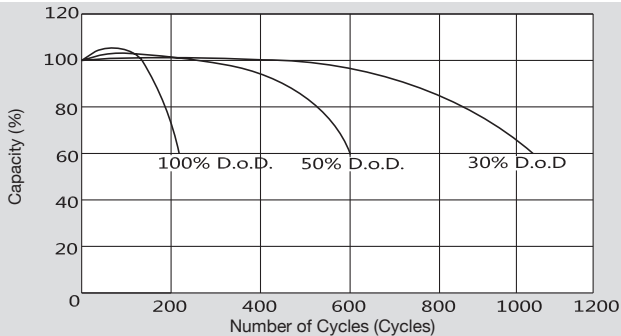
## Relationship Between Charging Voltage and Temperature



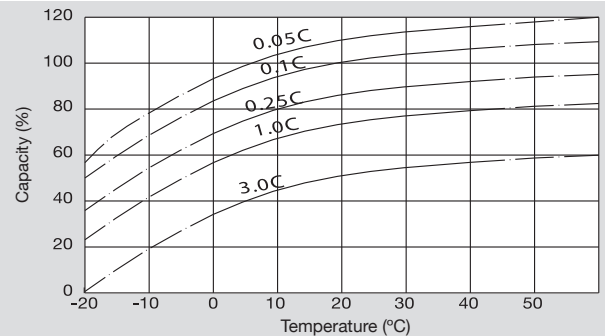
## Relationship Between OCV and Residual Capacity (25°C)



## Cycle Service Life in Relation to Depth of Discharge



## Temperature Effects on Capacity



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