

AccuForce 12V - 100Ah | VRLA Battery



Specifications

Nominal Voltage	12 V		
Number of cells	6		
Design Life	10 years		
Dimensions	Length	330 mm	
	Width	171 mm	
	Height	215 mm	
	Total Height	220 mm	
Approx. Weight	28 kg		
	Nominal Capacity (25°C)	10 hours rate (10.0 A, 10.8 V)	100 Ah
Max. Discharge Current (25°C)	5 hours rate (16.6 A, 10.5 V)	83 Ah	
	1 hour rate (61.0 A, 9.6 V)	61 Ah	
	Internal Resistance	5.2 mOhms	
Fully Charged battery (25°C)	3% of capacity declined per month at 20°C (average)		
Self-Discharge	Discharge	: -20~60°C	
	Charge	: -10~60°C	
	Storage	: -20~60°C	
Operating Temperature Range	2100 A		
	Short Circuit Current	Cycle use 2.40-2.45 Vpc	
Charge Methods:	Maximum charging current	30 A	
	Constant Voltage Charge (25°C)	Temperature compensation	-30 mV/°C
Standby use	2.20-2.30 Vpc		Temperature compensation -20 mV/°C

Applications

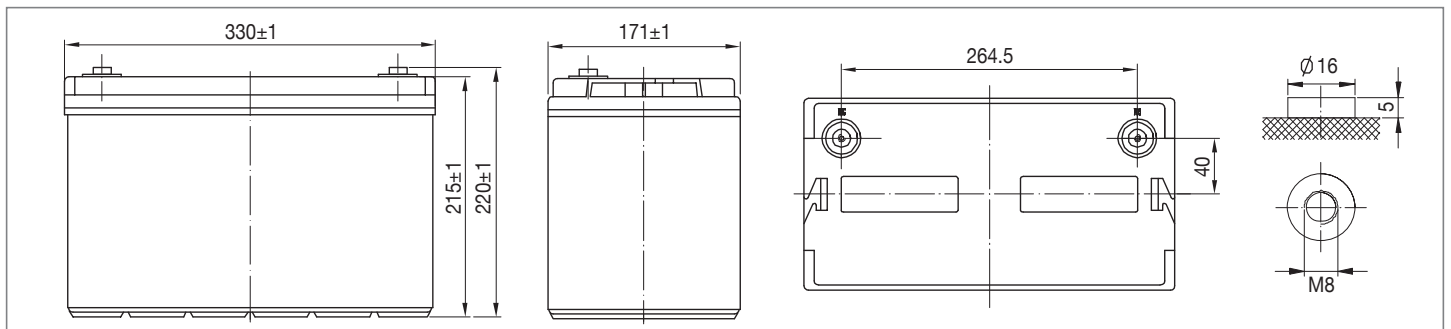
- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency backup power supplies
- Electronic apparatus and equipment
- Communication power supplies
- DC power supplies
- Auto control system



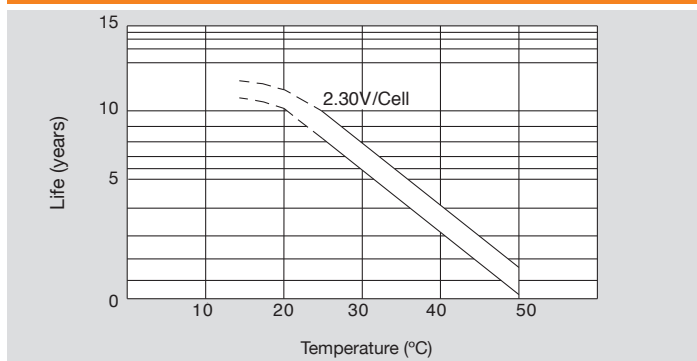
Battery Construction

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

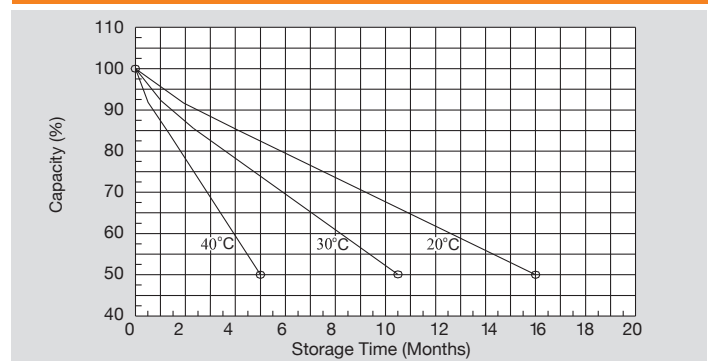
Dimensions



Temperature Effects on Float Life

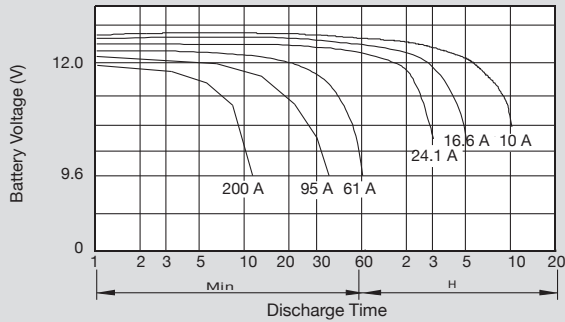


Self Discharge Characteristics

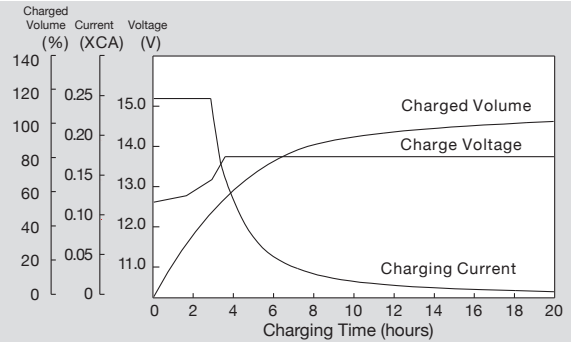


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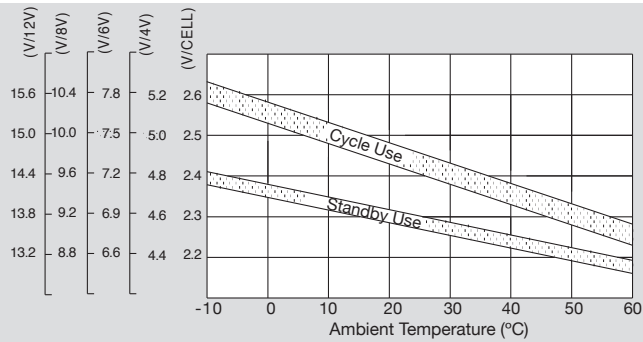
Discharge Characteristics (25°C)



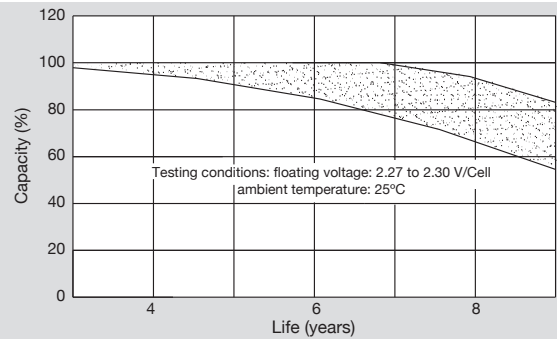
Constant Voltage Charging Characteristic (0.25 CA, 25°C)



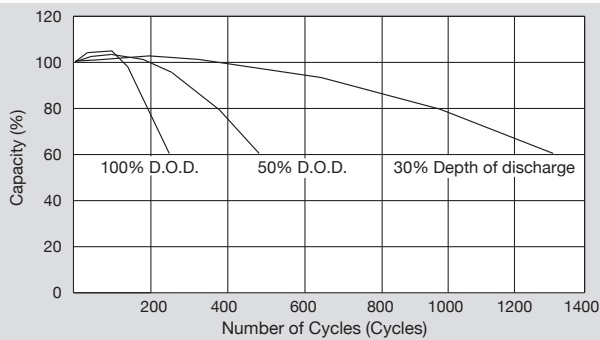
Relationship Between Charging Voltage and Temperature



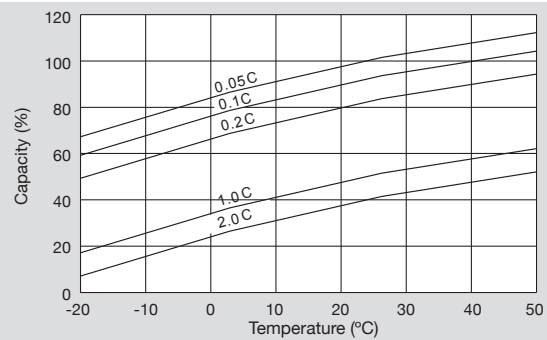
Life Characteristics of Standby Use



Cycle Service Life in Relation to Depth of Discharge



Temperature Effects on Capacity



Constant Current Discharge (Amperes) at 25°C

End Voltage (Volts/Cell)	10 min	15 min	30 min	1 h	3 h	5 h	10 h	20 h
1.60 V	210	173	98.9	61.0	25.1	17.6	10.8	5.50
1.65 V	197	164	95.0	60.6	24.6	17.3	10.6	5.45
1.70 V	182	156	92.2	59.7	24.1	17.0	10.4	5.40
1.75 V	170	145	89.3	58.9	23.5	16.6	10.2	5.35
1.80 V	156	136	87.4	57.1	22.8	16.3	10.0	5.30

Constant Power Discharge (Watts/Cell) at 25°C

End Voltage (Volts/Cell)	10 min	15 min	30 min	45 min	1 h	2 h	3 h	5 h
1.60 V	372	304	198	138	119	68.2	48.4	33.8
1.65 V	353	299	187	134	117	67.0	47.8	33.6
1.70 V	335	290	182	132	116	65.8	47.3	33.3
1.75 V	317	279	176	129	112	64.6	46.7	33.2
1.80 V	296	270	170	126	109	63.9	45.9	32.9

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