

AccuForce 12V - 120Ah | VRLA Battery



Specifications

Nominal Voltage	12 V	
Number of cells	6	
Design Life	10 years	
Dimensions	Length	410 mm
	Width	176 mm
	Height	224 mm
	Total Height	224 mm
Approx. Weight	33.5 kg	
Nominal Capacity (25°C)	10 hours rate (12.0 A, 10.8 V)	120.0 Ah
	5 hours rate (19.2 A, 10.5 V)	96.0 Ah
	1 hour rate (73.3 A, 9.6 V)	73.3 Ah
Max. Discharge Current (25°C)	950 A (5s)	
Internal Resistance	4.4 mOhms	
Fully Charged battery (25°C)		
Self-Discharge	3% of capacity declined per month at 20°C (average)	
	Discharge	-20~60°C
	Charge	-10~60°C
Operating Temperature Range	Storage : -20~60°C	
	Short Circuit Current	
Charge Methods:	Constant Voltage Charge (25°C)	2250 A
	Cycle use	2.30-2.35 Vpc
	Maximum charging current	36 A
	Temperature compensation	-30 mV/°C
	Standby use	2.23-2.27 Vpc
	Temperature compensation	-20 mV/°C

Applications

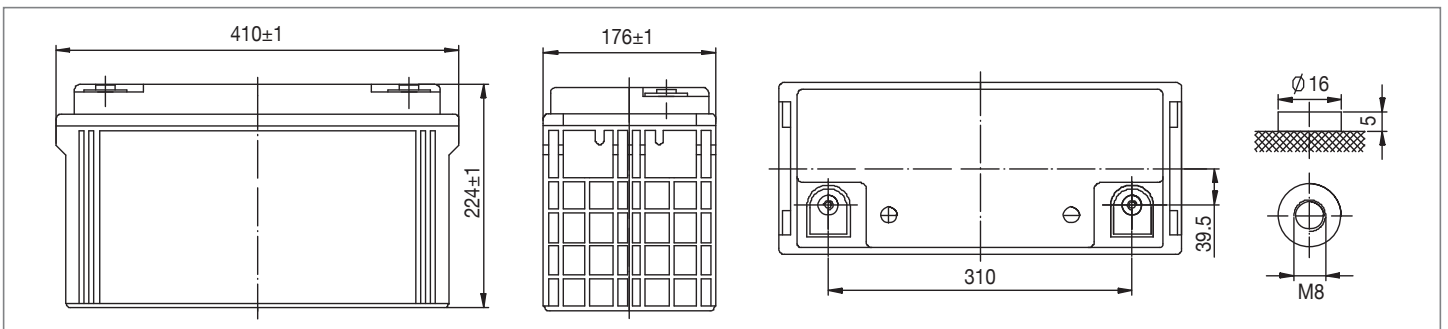
- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency backup power supplies
- Electronic apparatus and equipment
- Communication power supplies
- DC power supplies
- Auto control system



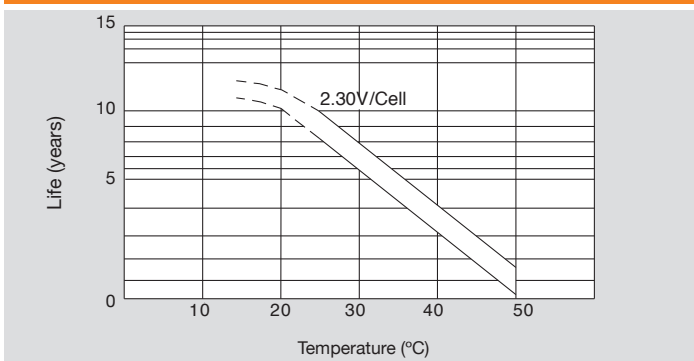
Battery Construction

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

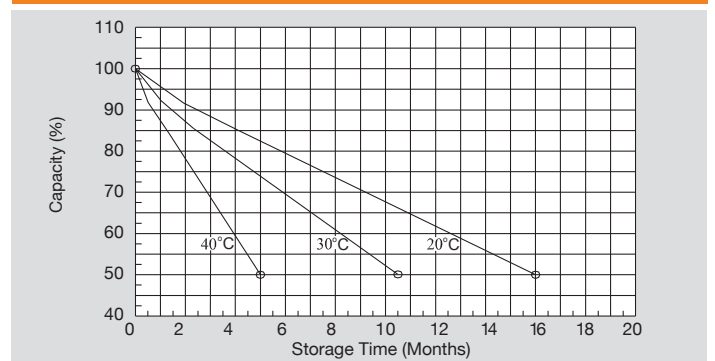
Dimensions



Temperature Effects on Float Life

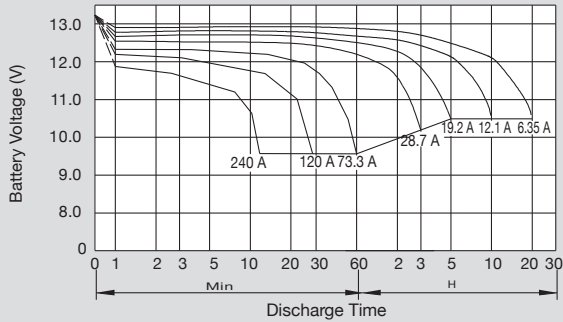


Self Discharge Characteristics

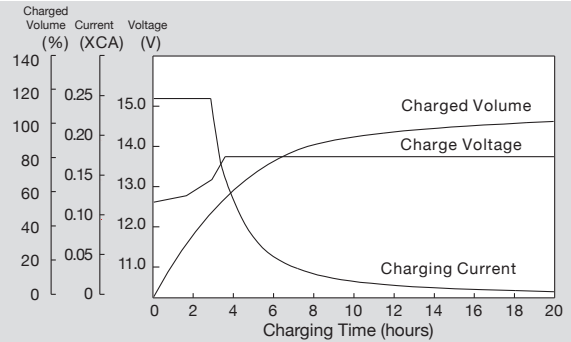


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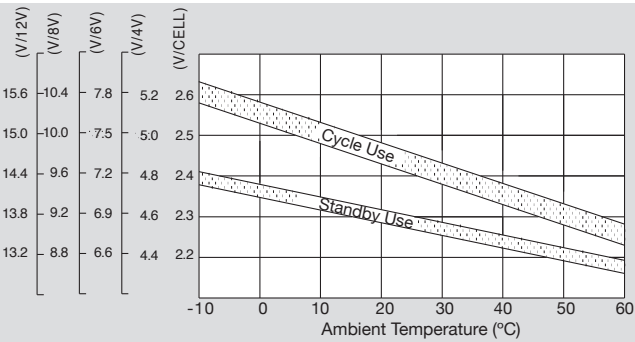
Discharge Characteristics (25°C)



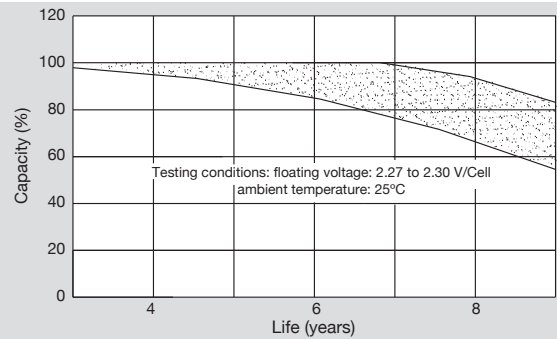
Constant Voltage Charging Characteristic (0.25 CA, 25°C)



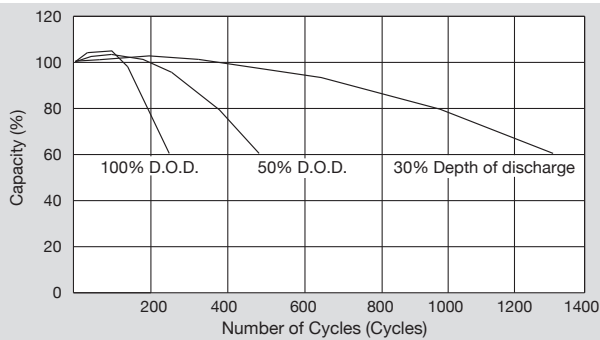
Relationship Between Charging Voltage and Temperature



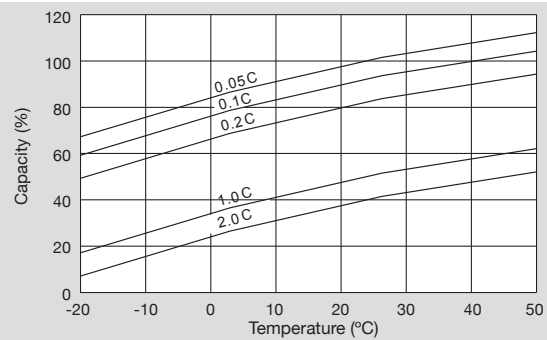
Life Characteristics of Standby Use



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	258	209	117	73.3	29.9	20.3	12.4	6.43
1.65 V	244	201	114	72.8	29.3	20.1	12.3	6.41
1.70 V	231	193	110	71.3	28.7	19.7	12.2	6.38
1.75 V	217	184	106	69.1	28.0	19.2	12.1	6.35
1.80 V	203	177	104	67.0	27.2	18.9	12.0	6.30

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	460	367	225	159	147	82	58.0	40.7
1.65 V	437	354	218	156	145	80	57.3	40.5
1.70 V	414	343	211	153	143	79	56.6	40.2
1.75 V	392	331	204	149	139	77	56.0	40.0
1.80 V	367	319	198	146	134	75	55.0	39.6

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