

# AccuForce 12V - 17Ah | VRLA Battery



## Specifications

Nominal Voltage	12 V	
Number of cells	6	
Design Life	5 years	
Dimensions	Length	181 mm
	Width	77 mm
	Height	167 mm
	Total Height	167 mm
Approx. Weight	5.3 kg	
Nominal Capacity (25°C)	20 hours rate (0.85 A, 10.5 V)	17.00 Ah
	10 hours rate (1.68 A, 10.5 V)	16.80 Ah
	5 hours rate (3.09 A, 10.5 V)	15.45 Ah
	1 hour rate (11.8 A, 9.6 V)	11.80 Ah
Max. Discharge Current (25°C)	255 A (5s)	
Internal Resistance	16.5 mOhms	
Fully Charged battery (25°C)		
Self-Discharge	3% of capacity declined per month at 20°C (average)	
Operating Temperature Range	Discharge	-20~60°C
	Charge	-10~60°C
	Storage	-20~60°C
Short Circuit Current	850 A	
Charge Methods:	Cycle use	2.30-2.35 Vpc
	Maximum charging current	6.8 A
	Temperature compensation	-30 mV/°C
	Constant Voltage Charge (25°C)	Standby use
	Temperature compensation	-20 mV/°C

## Applications

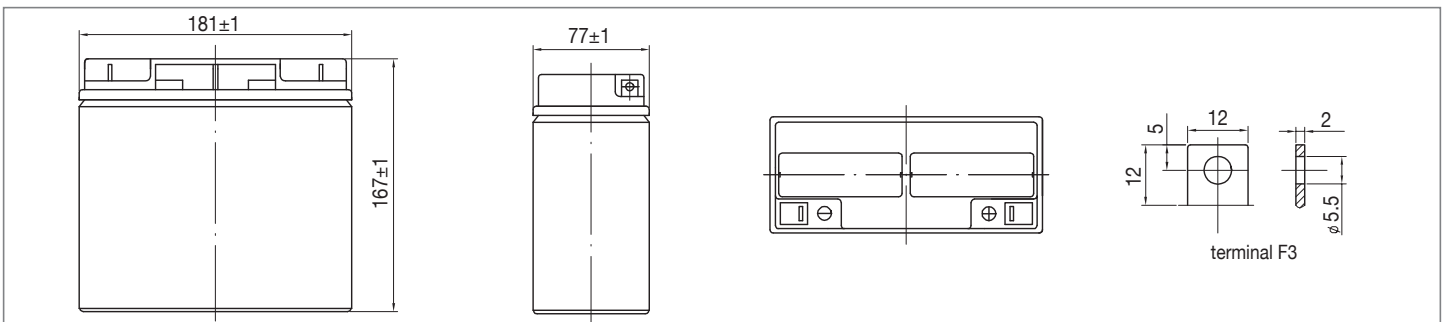
- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency backup power supplies
- Electronic apparatus and equipment
- Communication power supplies
- DC power supplies
- Auto control system



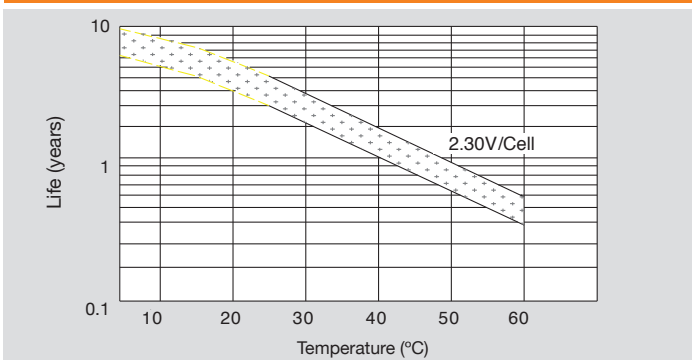
## Battery Construction

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

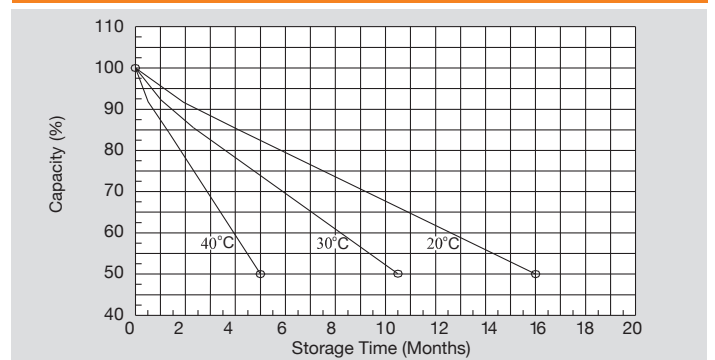
## Dimensions



## Temperature Effects on Float Life

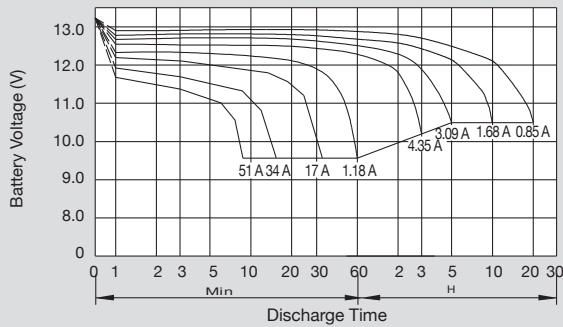


## Self Discharge Characteristics

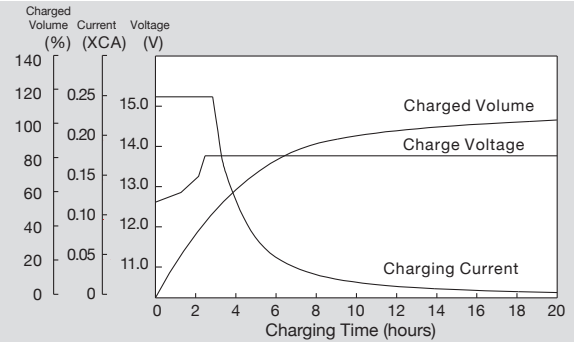


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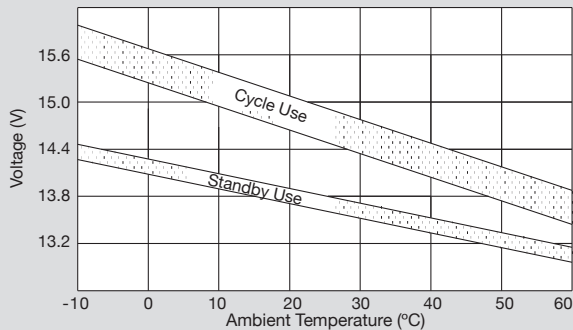
## Discharge Characteristics (25°C)



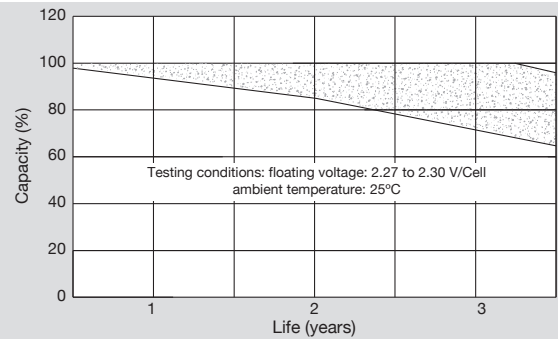
## Constant Voltage Charging Characteristic (0.25 CA, 25°C)



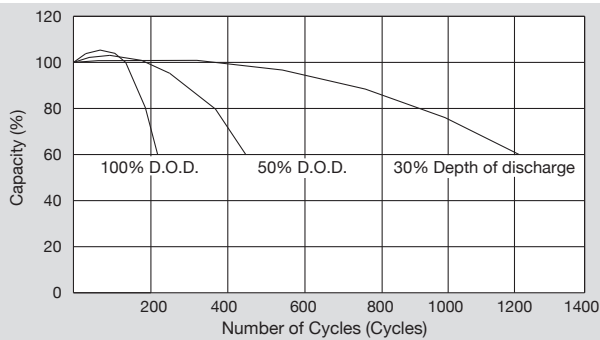
## Relationship Between Charging Voltage and Temperature



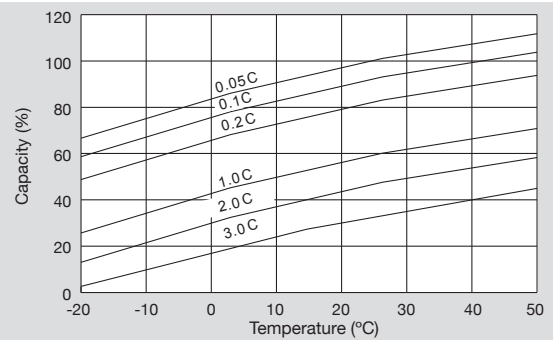
## Life Characteristics of Standby Use



## Cycle Service Life in Relation to Depth of Discharge



## Temperature Effects on Capacity



## Constant Current Discharge (Amperes) at 25°C

End Voltage (Volts/Cell)	5 min	10 min	15 min	30 min	1 h	3 h	5 h	10 h	20 h
1.60 V	64.9	44.1	34.0	19.8	11.8	4.57	3.09	1.78	0.89
1.65 V	62.8	43.0	33.3	19.4	11.6	4.50	3.03	1.75	0.88
1.70 V	60.5	41.9	32.6	18.9	11.4	4.42	2.97	1.72	0.87
1.75 V	58.0	40.7	31.8	18.4	11.2	4.35	2.91	1.68	0.85
1.80 V	55.3	39.4	30.9	17.9	10.9	4.27	2.84	1.65	0.84

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

End Voltage (Volts/Cell)	5 min	10 min	15 min	30 min	45 min	1 h	2 h	3 h	5 h
1.60 V	111	78.6	61.3	35.3	27.4	22.4	13.0	9.09	6.13
1.65 V	107	77.2	60.2	34.8	27.1	22.2	12.9	9.01	6.07
1.70 V	103	75.8	59.0	34.3	26.8	22.0	12.8	8.92	6.01
1.75 V	98	74.3	57.8	33.7	26.4	21.7	12.7	8.83	5.95
1.80 V	94	72.8	56.5	33.1	26.0	21.5	12.5	8.74	5.88

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