

# AccuForce 12V - 65Ah | VRLA Battery



## Specifications

Nominal Voltage	12 V	
Number of cells	6	
Design Life	5 years	
Dimensions	Length	350 mm
	Width	167 mm
	Height	179 mm
	Total Height	179 mm
Approx. Weight	20.4 kg	
Nominal Capacity (25°C)	20 hours rate (3.4 A, 10.8 V)	68.0 Ah
	10 hours rate (6.5 A, 10.8 V)	65.0 Ah
	5 hours rate (11.0 A, 10.5 V)	55.0 Ah
	1 hour rate (45.1A, 9.6 V)	45.1 Ah
Max. Discharge Current (25°C)	650 A (5s)	
Internal Resistance	5.5 mOhms	
Fully Charged battery (25°C)	5.5 mOhms	
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	1700 A	
Charge Methods:	Cycle use	2.30-2.35 Vpc
	Maximum charging current	26 A
	Temperature compensation	-30 mV/°C
	Constant Voltage Charge (25°C)	2.23-2.27 Vpc
	Temperature compensation	-20 mV/°C

## Applications

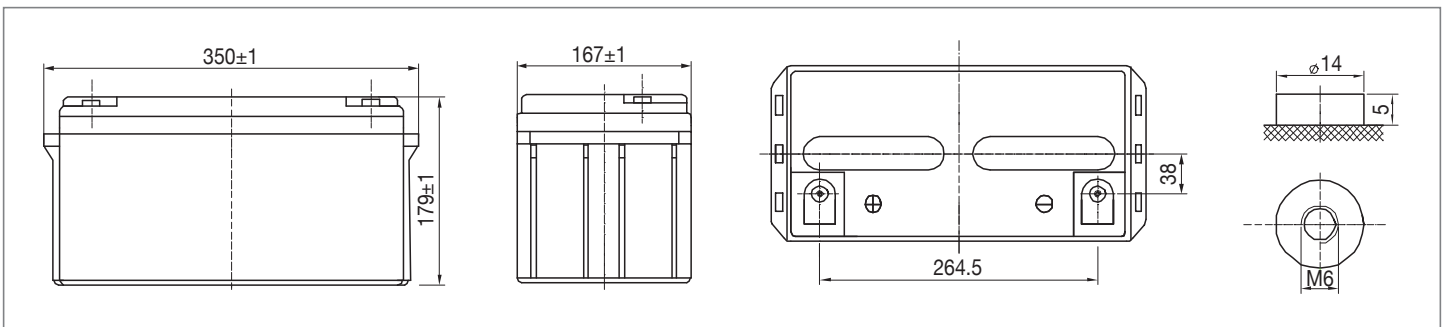
- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency backup power supplies
- Electronic apparatus and equipment
- Communication power supplies
- DC power supplies
- Auto control system



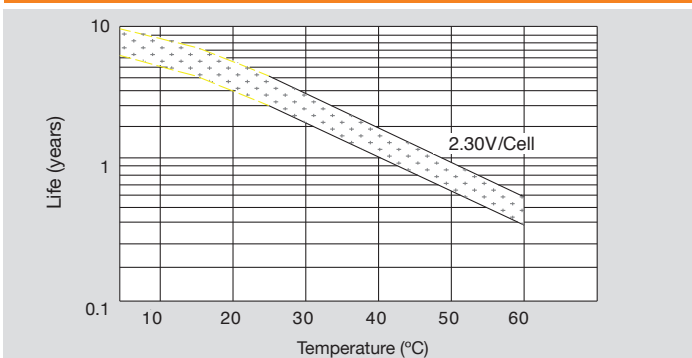
## Battery Construction

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

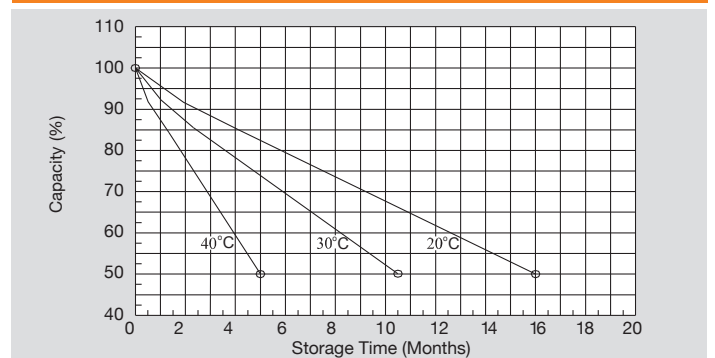
## Dimensions



## Temperature Effects on Float Life

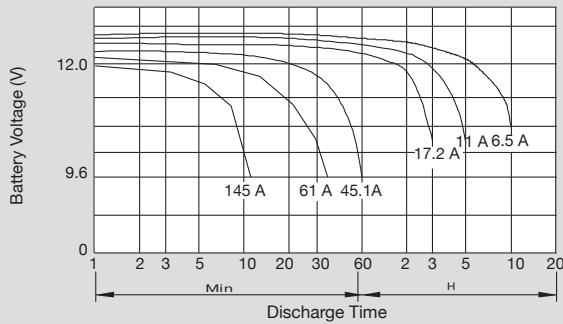


## Self Discharge Characteristics

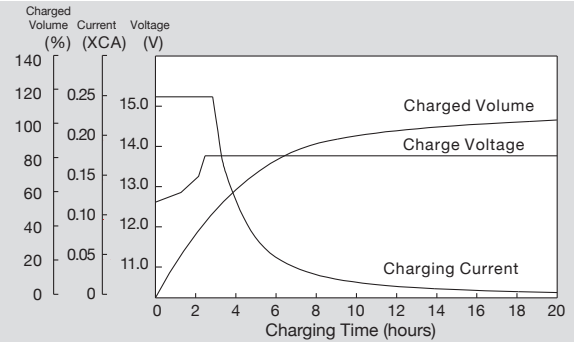


# AccuForce 12V - 65Ah | VRLA Battery

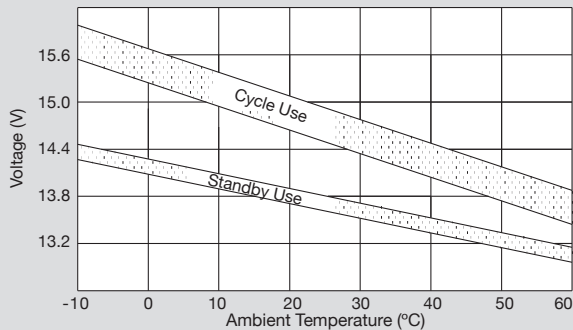
## Discharge Characteristics (25°C)



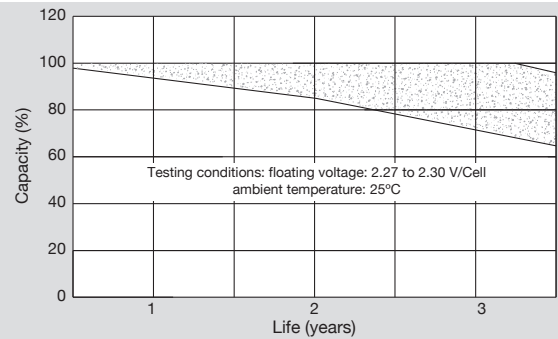
## Constant Voltage Charging Characteristic (0.25 CA, 25°C)



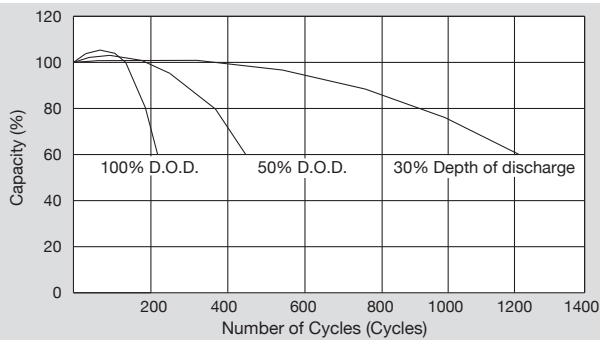
## Relationship Between Charging Voltage and Temperature



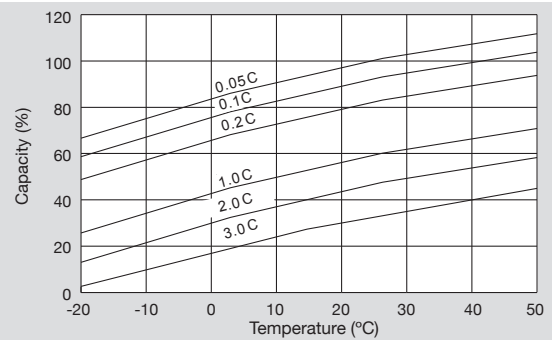
## Life Characteristics of Standby Use



## 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	212	151	126	75.4	45.1	18.4	11.8	6.70	3.48
1.65 V	201	144	121	73.3	44.0	18.0	11.6	6.58	3.46
1.70 V	189	137	115	71.3	43.0	17.6	11.3	6.56	3.44
1.75 V	177	129	109	69.2	41.9	17.2	11.0	6.53	3.42
1.80 V	164	120	102	66.9	41.0	16.9	10.7	6.50	3.40

## 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	378	275	207	129	99.1	81.8	47.5	33.8	22.5
1.65 V	356	261	203	128	97.6	80.0	46.6	33.2	22.3
1.70 V	335	246	200	127	95.7	78.3	45.6	32.5	22.0
1.75 V	314	231	196	124	93.6	76.5	44.5	31.8	21.7
1.80 V	302	215	187	122	91.3	75.7	43.3	31.1	21.4

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