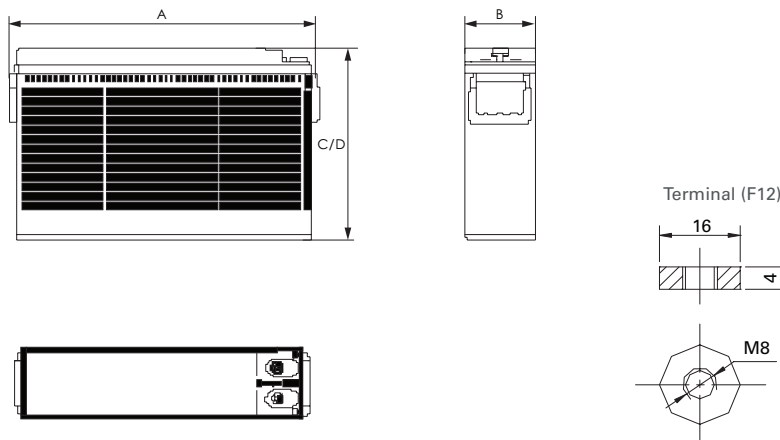


## Valve Regulated Lead Acid Battery

Discover<sup>®</sup> AGM Series VRLA Industrial Batteries provide superior high integrity and reliability for commercial, industrial, and private applications. The maintenance-free Valve Regulated Lead Acid (VRLA) construction make Discover<sup>®</sup> Standard AGM Series Batteries the definitive choice for mobility and Home Medical Equipment (HME), solar and renewable energy, electronics and security, marine and RV, and utility applications.

### MECHANICAL DRAWINGS



### MECHANICAL SPECIFICATIONS

Length (A)	22.0 in	560 mm
Width (B)	4.92 in	125 mm
Height (C)	12.5 in	317 mm
Total Height (D)	12.5 in	317 mm
Weight	123.2 lbs	56 kgs
Terminal (Opt'l)	F12	
Cells	6	
Electrolyte	AGM	

NOTE: There is a tolerance of +/-2%.

TERMINAL TORQUE: Please refer to our document, located in the Resources webpage ([discoverbattery.com/resources](http://discoverbattery.com/resources)).

CAUTION\*: Extra considerations must be given to depths of discharge, operating voltages and currents when designing systems for use at maximum temperatures.

### ELECTRICAL SPECIFICATIONS

Voltage	12 V
Internal Resistance	4 mΩ
Short Circuit 20°C (68°F)	-
20 HR	190 Ah
10 HR	180 Ah
5 HR	160 Ah
1 HR	118 Ah
15 MIN	77.5 Ah
Charge Temperature	-10°C (14°F) to 50°C (122°F)
Discharge Temperature	-40°C (-40°F) to 50°C (122°F)
Maximum Discharge*	-40°C (-40°F) to 60°C (140°F)

### DISCHARGE CONSTANT CURRENT (AMPERES AT 25°C/77°F)

Final Voltage (VPC)	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	3 HR	5 HR	10 HR	20 HR
1.60V	-	395	310	195	118	49.5	32.7	18.3	9.70
1.65V	-	375	295	190	116	49.0	32.5	18.3	9.70
1.70V	-	355	280	185	113	48.5	32.3	18.2	9.65
1.75V	-	335	264	170	110	47.5	32.0	18.1	9.60
1.80V	-	310	246	164	107	46.0	31.7	18.0	9.50

### DISCHARGE CONSTANT POWER (WATTS AT 25°C/ 77°F)

Final Voltage (VPC)	5 MIN	10 MIN	15 MIN	30 MIN	45 MIN	1 HR	2 HR	3 HR	5 HR
1.60V	-	675	530	355	280	222	134	96.0	65.0
1.65V	-	645	508	345	274	218	132	95.0	64.5
1.70V	-	615	485	335	268	214	130	94.0	64.0
1.75V	-	585	463	324	262	209	128	93.0	63.5
1.80V	-	550	440	312	254	205	125	92.0	62.8

### BENEFITS & FEATURES

Tank formed lead-tin-calcium plates deliver consistent dependable performance and promote long life.

Maintenance free technology.

99% gas recombination for extended life in float applications.

Multiple terminal, configuration options and carrying handles available with most models.

Classified as a non-spillable battery and is not restricted for transportation by:

- Air (IATA/ICAO provision 67)
- Surface (DOT-CFR-HMR49)
- Water (per IMDG amendment 27)

Flame retardant ABS case and cover with UL94 V0 rating available.

UL924 recognized flame arresting low pressure safety vents.

98% recyclable.

Up to 12 year design life in float service.

### CERTIFIED QUALITY

Discover<sup>®</sup> and its facilities and products are tested and certified to multiple standards:

- ISO, UL, CE, and QS standards
- ETTS Germany
- Euro Bat classification for Environmental Stewardship Standards

Designed in accordance with and published in compliance with applicable BCI, IEC and BS EN standards, including:

- IEC60896-21/22
- BS EN 60254-1:2005
- AS/NZS 4029.2:2000



## CHARGE AND DISCHARGE

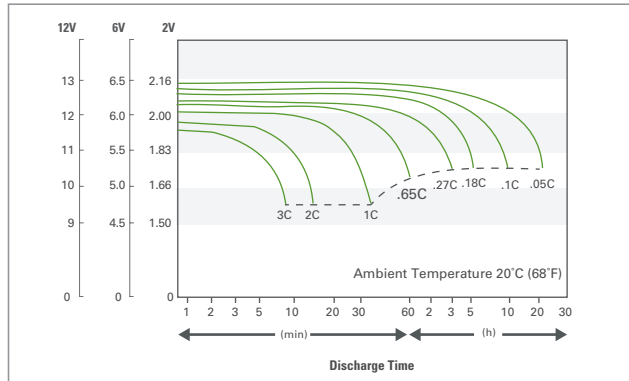
Max Charge / Discharge Currents	Peak (5 seconds)	Peak (10 seconds)	Max Continuous
Charge	1c20	0.75c20	0.25c20
Discharge	15c20	10c20	0.5c20

**Note 1 - Float (Stand-By) Use:** Hold a constant voltage of 2.25vpc to 2.30vpc continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

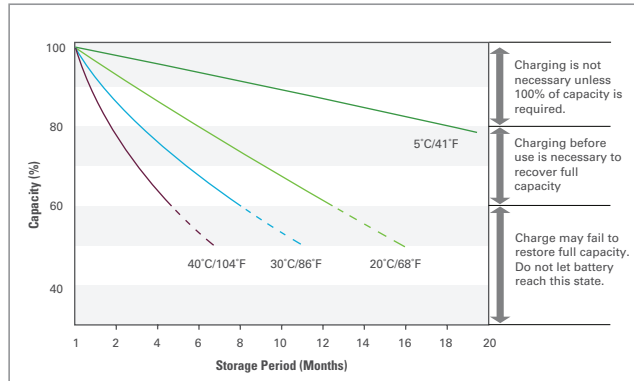
**Note 2 - Cyclic Use:** Limit initial currents to 0.25C20 amps. Charge until battery voltage reaches 2.40 to 2.45vpc. Hold at 2.40 to 2.45vpc until current drops to under 0.01C20 amps. Battery is fully charged under these conditions, and charger should be disconnected or switched to "float" voltage.

**Note 3 - Temperature Coefficient:** For temperatures below 25°C, adjust +0.005VPC/°C (or 0.003VPC per °F). For temperatures above 25°C, adjust -0.005VPC/°C (or 0.003VPC per °F).

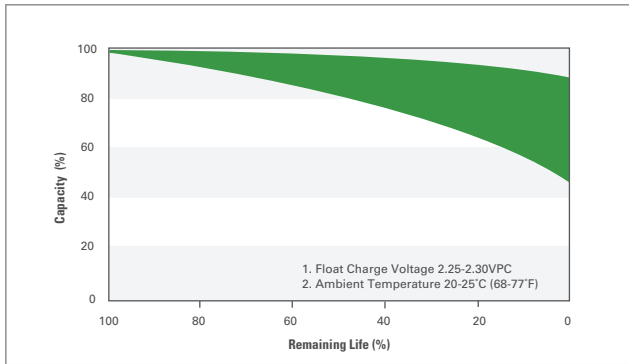
## DISCHARGE CHARACTERISTICS



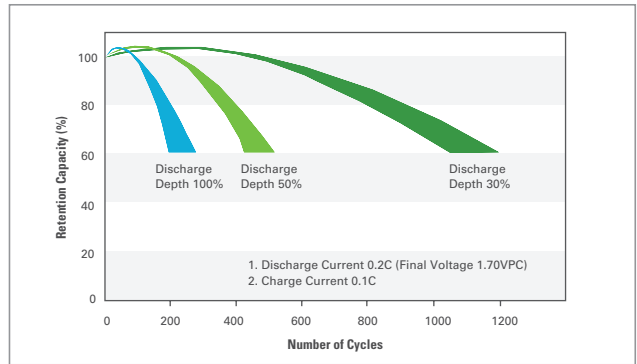
## SELF-DISCHARGE CHARACTERISTICS



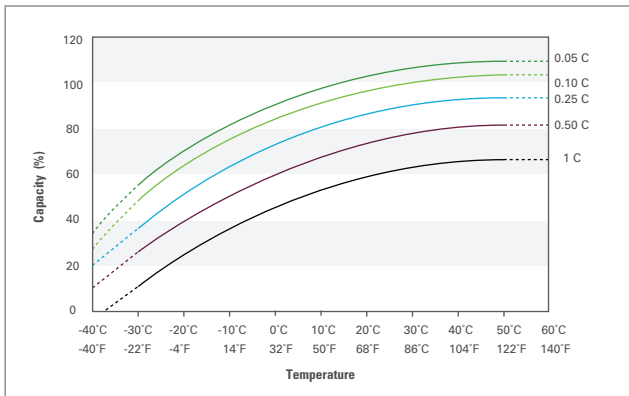
## LIFE CHARACTERISTICS IN STAND-BY USE



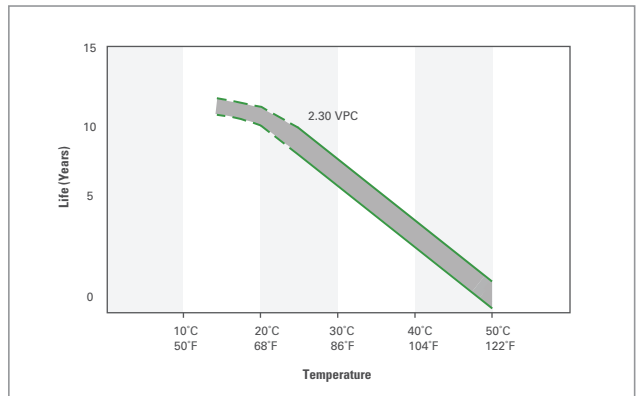
## LIFE CHARACTERISTICS IN CYCLIC USE (CYCLIC MODELS ONLY)



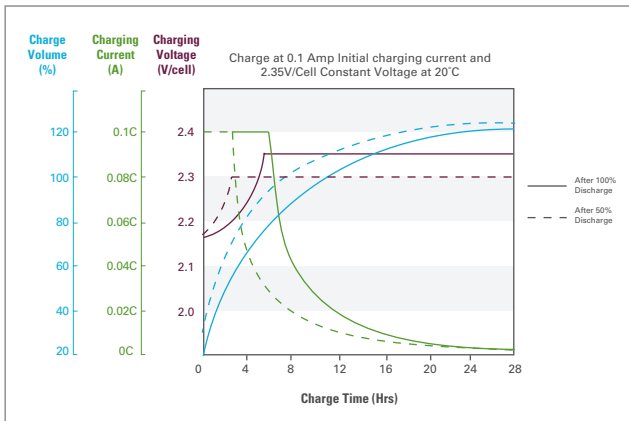
## TEMPERATURE EFFECTS ON CAPACITY



## TEMPERATURE EFFECTS ON FLOAT LIFE

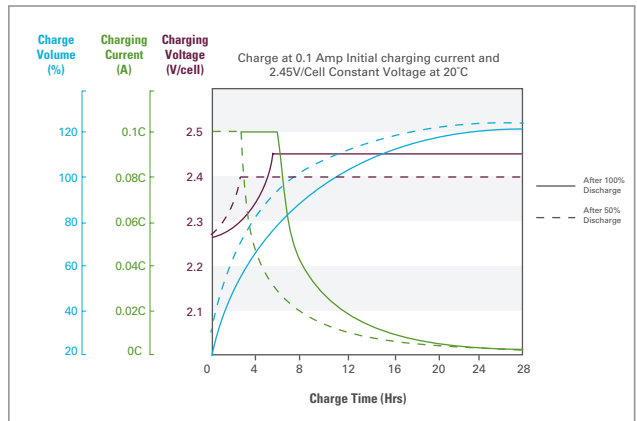


## STANDBY/FLOAT APPLICATIONS



See Note 1

## CYCLIC APPLICATIONS



See Note 2