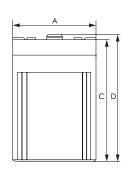
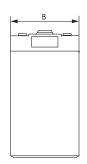
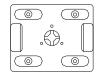
# **Valve Regulated Lead Acid Battery**

Discover® 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® 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**







Terminal (F10-M8)



#### **MECHANICAL SPECIFICATIONS**

Length (A)	8.27 in	210 mm			
Width (B)	6.93 in	176 mm			
Height (C)	13.0 in	330 mm			
Total Height (D)	14.4 in	367 mm			
Weight	56.1 lbs	25.5 kgs			
Terminal (Opt'I)	F10				
Cells	1				
Electrolyte	AGM				

TERMINAL TORQUE: Please refer to our document, located in the Resources webpage (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	2V
Internal Resistance	-
Short Circuit 20°C (68°F)	-
20 HR	430 Ah
10 HR	400 Ah
5 HR	350 Ah
1 HR	245 Ah
15 MIN	-
Charge Temperature	-10°C (14°F) to 50°C (122°F)
Discharge Temperature	-20°C (-4°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)**

End Point V/C	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	3 HR	5 HR	10 HR	20 HR
1.60V	-	732	587	424	245	114	75.5	43.0	-
1.65V	-	694	559	405	236	110	73.8	42.4	-
1.70V	-	654	530	385	227	106	71.8	41.7	-
1.75V	-	614	500	365	217	102	70.0	40.9	-
1.80V	_	573	470	344	206	98.0	670	40.0	_

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

		•							
End Point V/C	5 MIN	10 MIN	15 MIN	30 MIN	45 MIN	1 HR	2 HR	3 HR	5 HR
1.60V	-	1285	912	740	643	495	311	215	140
1.65V	-	1210	863	703	612	473	288	210	138
1.70V	-	1135	813	665	578	452	272	204	135
1.75V	-	1061	763	625	545	427	262	198	132
1.80V	-	987	713	585	511	403	246	188	125

#### **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)
- Ground (STB, 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**

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 BS EN 60254-1:2005 (MOD)

Discover® and its facilities and products are certified to multiple standards:

- ISO, UL, OS, and TUV standards
- ETTS Germany
  Euro Bat classification for Environmental Stewardship Standards















## **CHARGE AND DISCHARGE**

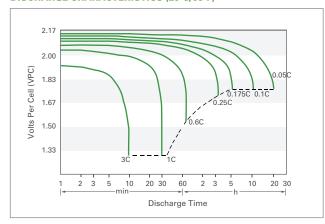
Max Charge / Discharge Currents	Peak (5 seconds)	Peak (10 seconds)	Max Continuous	
Charge	1c20	0.75c20	0.25c20	
Discharge	15c20	10c20	0.5c20	

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

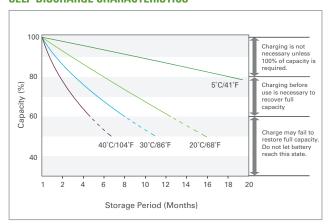
Cyclic Use: Limit initial currents to 0.25C20 amps. Charge until battery voltage reaches 2.40 to 2.45vpc. Hold at 2.40 to 2.45vpc until current drops to under 0.01C20 amps. Battery is fully charged under these conditions, and charger should be disconnected or switched to "float" voltage.

Temperature Coefficient: Adjust charging voltage to +/- 0.005vpc (C, 0.003vpc/F) from 25°C (77°F).

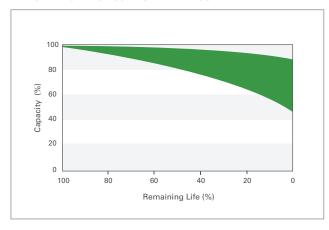
#### **DISCHARGE CHARACTERISTICS (20°C/68°F)**



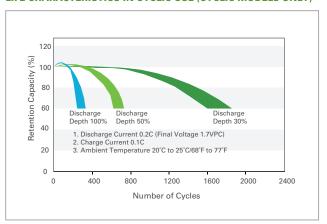
#### **SELF-DISCHARGE CHARACTERISTICS**



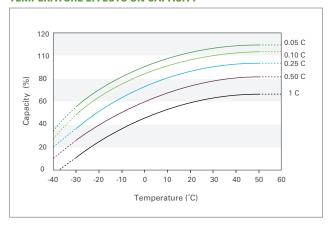
## LIFE CHARACTERISTICS IN STAND-BY USE



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



### **TEMPERATURE EFFECTS ON CAPACITY**



### TEMPERATURE EFFECTS ON FLOAT LIFE

