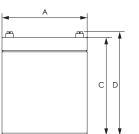
Discover® Innovative Battery Solutions D1229 (STANDBY/FLOAT)

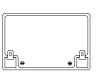
DATASHEET

# **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)	3.11 in	79 mm			
Width (B)	2.19 in	56 mm			
Height (C)	3.88 in	99 mm			
Total Height (D)	4.09 in	104 mm			
Weight	2.33 lbs	1.06 kgs			
Terminal (Opt'I)	F1				
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).

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

## 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	13.5	8.80	6.95	4.00	2.10	0.85	0.54	0.31	0.17
1.65V	12.9	8.45	6.70	3.86	2.02	0.83	0.53	0.30	0.17
1.70V	12.2	8.07	6.43	3.71	1.93	0.80	0.52	0.29	0.16
1.75V	11.4	7.67	6.15	3.56	1.84	0.77	0.50	0.28	0.16
1.80V	10.5	7.20	5.85	3.40	1.74	0.73	0.48	0.26	0.15

# 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	26.6	17.3	13.9	8.35	6.00	4.58	2.63	1.77	1.18
1.65V	25.4	16.6	13.5	8.08	5.80	4.44	2.56	1.73	1.16
1.70V	24.1	15.8	13.0	7.79	5.58	4.29	2.48	1.68	1.13
1.75V	22.7	14.9	12.5	7.50	5.36	4.14	2.40	1.63	1.10
1.80V	21.2	13.9	11.9	7.20	5.11	3.97	2.31	1.57	1.06

# **BENEFITS & FEATURES**

Optimized lead calcium plate technology deliver high power denisty and consistent performance.

Special grid alloy and paste formula to reduce gassing and self-discharge.

Sealed valve regulated non-spillable maintenance-free technology.

99% gas recombination for extended life in float or cyclic applications.

Multiple battery terminal options and carrying handles.

UL924 recognized flame arresting low pressure safety vents.

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

Up to 12 year design life in float service models.

98% recyclable.

Classified as a non-spillable battery and is not restricted for transportation by: • Air (IATA/ICAO provision 67)

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

# **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



Terminal (F1)

6.35

**ELECTRICAL SPECIFICATIONS** 

12 V

40 mΩ

2.9 Ah

2.6 Ah

2.5 Ah

2.1 Ah

-10°C (14°F) to 50°C (122°F)

-20°C (-4°F) to 50°C (122°F)

-40°C (-40°F) to 60°C (140°F)

48

Voltage

20 HR

10 HR

5 HR

1 HR

15 MIN

**Charge Temperature** 

**Discharge Temperature** 

Maximum Discharge\*

Internal Resistance

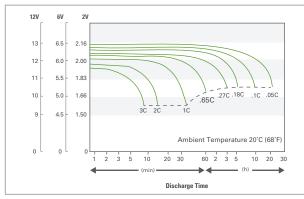
Short Circuit 20°C (68°F)

0.8

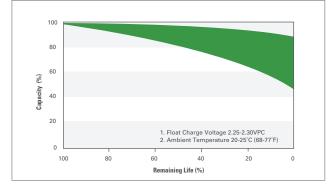
### **CHARGE AND DISCHARGE**

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

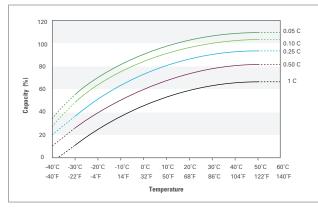
## **DISCHARGE CHARACTERISTICS**



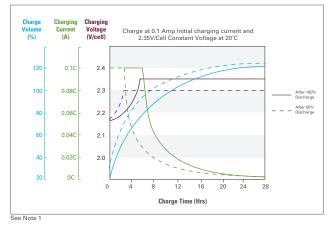
## LIFE CHARACTERISTICS IN STAND-BY USE



### **TEMPERATURE EFFECTS ON CAPACITY**



## **STANDBY/FLOAT APPLICATIONS**

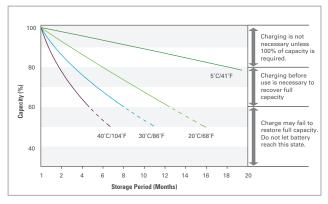


Note 1 - Float (Stand-By) Use: Hold a constant voltage of 2.25vpc to 2.30vpc continuously. When held at this voltage, the battery will seeks its own current level and maintain itself in a fully charged condition.

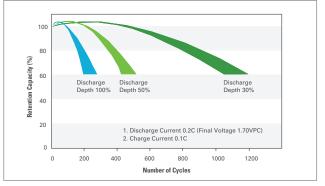
Note 2 - Cyclic Use: Limit initial currents to 0.25C20 amps. Charge until battery voltage reaches 2.40 to 2.45vpc. Hold at 2.40 to 2.45vpc until current drops to under 0.01C20 amps. Battery is fully charged under these conditions, and charger should be disconnected or switched to "float" voltage.

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).

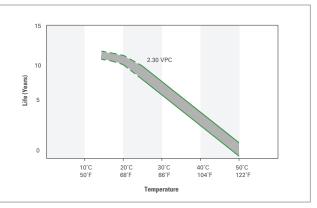
#### **SELF-DISCHARGE CHARACTERISTICS**



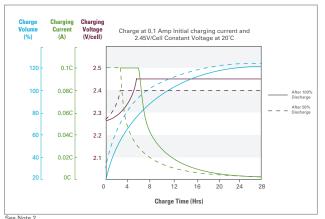
### LIFE CHARACTERISTICS IN CYCLIC USE (CYCLIC MODELS ONLY)



### **TEMPERATURE EFFECTS ON FLOAT LIFE**



## **CYCLIC APPLICATIONS**



Discover<sup>®</sup> attempts to ensure the correctness of the product description and data contained herein. We reserve the right to change designs, specifications and pricing at any time without notice or obligation. It is the responsibility of the reader of this information to verify any and all information presented herein.