D122000DSE

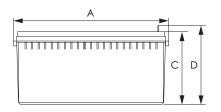
(CYCLIC/DEEP CYCLE)

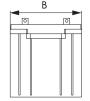
DATASHEET

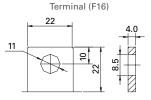
Valve Regulated Lead Acid Battery

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







Optional Terminal (F12)





MECHANICAL SPECIFICATIONS

Length (A)	20.8 in	530 mm			
Width (B)	8.0 in	209 mm			
Height (C)	8.4 in	214 mm			
Total Height (D)	9.3 in	236 mm			
Weight	122.1 lbs	55.5 kgs			
Terminal (Opt'l)	F16 (F12)				
Cells	6				
Electrolyte	AGM				

0

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.

ELECTRICAL SPECIFICATIONS

Voltage	12 V
Internal Resistance	4 mΩ
Short Circuit 20°C (68°F)	-
20 HR	200 Ah
10 HR	185 Ah
5 HR	165 Ah
1 HR	120 Ah
15 MIN	-
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	312	195	120	48.5	34.4	19.0	10.3
1.65V	-	383	303	190	118	47.8	34.0	18.9	10.2
1.70V	-	369	293	184	116	47.0	33.5	18.8	10.2
1.75V	-	353	282	178	114	46.1	33.0	18.7	10.1
1.80V	-	335	269	171	112	45.1	32.4	18.5	10.0

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	-	660	555	360	260	215	132	97.5	61.8
1.65V	-	644	542	350	253	210	129	96.5	61.2
1.70V	-	626	528	339	245	204	125	95.3	60.5
1.75V	-	606	513	327	237	198	121	94.0	59.7
1.80V	-	583	496	313	228	191	116	92.5	58.7

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)
- Ground (STB, DOT-CFR-HMR49)
- Water (per IMDG amendment 27)

CERTIFIED QUALITY

Discover® 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

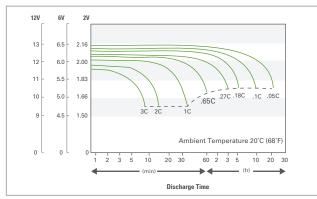
Max Charge / Discharge Currents	Peak (5 seconds)	Peak (10 seconds)	Max Continuous	
Charge	1c20	0.75c20	0.25c20	
Discharge	15c20	10c20	0.5c20	

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 seeks its own current level and maintain itself in a fully charged condition.

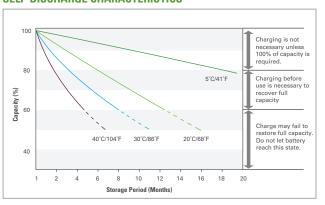
Note 2 - Cyclic Use: Limit initial currents to 0.25C20 amps. Charge until battery voltage reaches 2.40 to 2.45vpc. Hold at 2.40 to 2.45vpc until current drops to under 0.01C20 amps. Battery is fully charged under these conditions, and charger should be disconnected or switched to "float" voltage.

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).

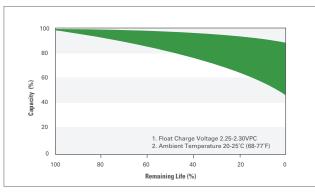
DISCHARGE CHARACTERISTICS



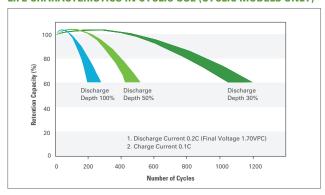
SELF-DISCHARGE CHARACTERISTICS



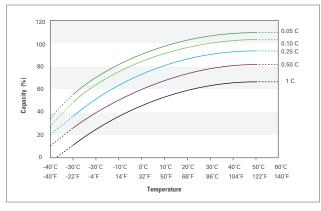
LIFE CHARACTERISTICS IN STAND-BY USE



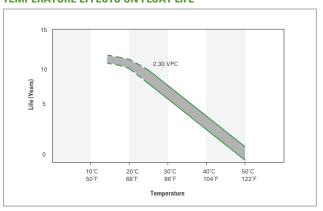
LIFE CHARACTERISTICS IN CYCLIC USE (CYCLIC MODELS ONLY)



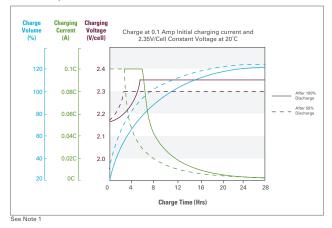
TEMPERATURE EFFECTS ON CAPACITY



TEMPERATURE EFFECTS ON FLOAT LIFE



STANDBY/FLOAT APPLICATIONS



CYCLIC APPLICATIONS

