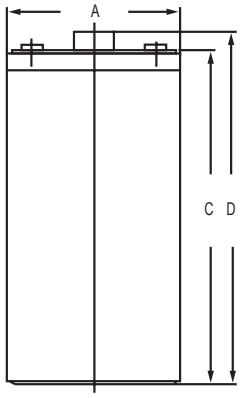
D22000D

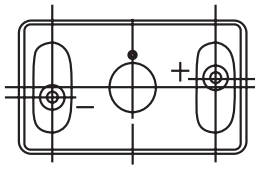
DATA SHEET

Cyclic AGM Battery Block

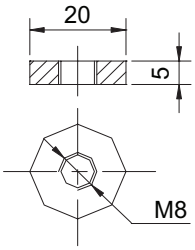
Discover® AGM Series VRLA Industrial Batteries provide superior high integrity and reliability for commercial, industrial, and private applications. The maintenance-free Valve Regulated Lead Acid (VRLA) construction make Discover® Standard AGM Series Batteries the definitive choice for mobility and Home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

Mechanical Drawings





Terminal (F10)



Benefits and 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

Mechanical Specifications

Length (A)	6.81 in	173 mm
Width (B)	4.37 in	111 mm
Height (C)	13.0 in	330 mm
Total Height (D)	14.3 in	364 mm
Weight	29.8 lbs	13.5 kgs
Terminal (Opt'l)	F10	
Cells	1	
Electrolyte	AGM	

TERMINAL TORQUE: Please refer to our document, located in the Resources webpage (www.discover-energy.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	2 V
Internal Resistance	0.75 mΩ
Short Circuit 20°C (68°F)	-
20 HR	215 Ah
10 HR	200 Ah
5 HR	175 Ah
1 HR	125 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)

Certifications and 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 BS EN 60254-1:2005 (MOD)

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

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

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	-	390	294	200	125	56.6	37.8	21.4	-
1.65V	-	370	280	192	121	54.8	37.0	21.2	-
1.70V	-	348	265	183	116	53.0	36.1	20.9	-
1.75V	-	327	250	172	111	50.0	35.0	20.5	-
1.80V	-	305	235	160	105	48.6	34.0	20.0	-

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	-	580	524	380	308	245	146	106	78.0
1.65V	-	559	499	364	299	235	142	104	76.6
1.70V	-	538	473	348	289	224	137	101	75.1
1.75V	-	517	446	331	280	213	132	98.0	73.5
1.80V	-	495	420	315	272	201	126	94.7	71.7

Contact Us

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Charge and Discharge

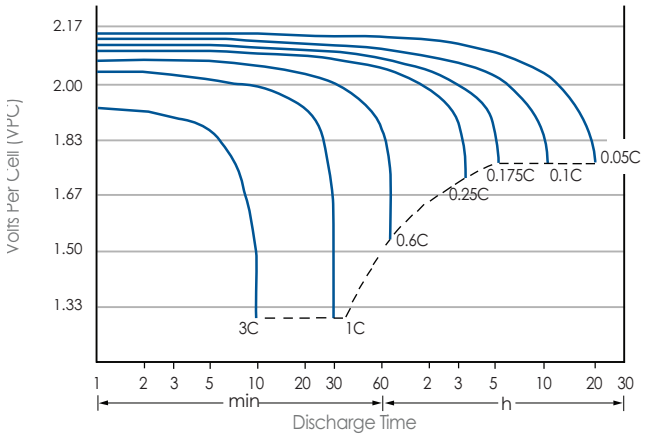
Max Charge / Discharge Currents	Peak (5 seconds)	Peak (10 seconds)	Max Continuous
Charge	1c20	0.75c20	0.25c20
Discharge	15c20	10c20	0.5c20

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.

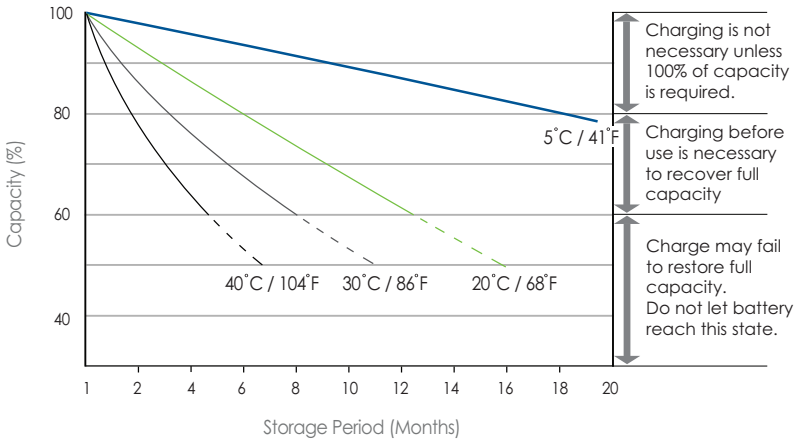
Cyclic Use: Limit initial currents to 0.25C20 amps. Charge until battery voltage reaches 2.40 to 2.45vpc. Hold at 2.40 to 2.45vpc until current drops to under 0.01C20 amps. Battery is fully charged under these conditions, and charger should be disconnected or switched to "float" voltage.

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

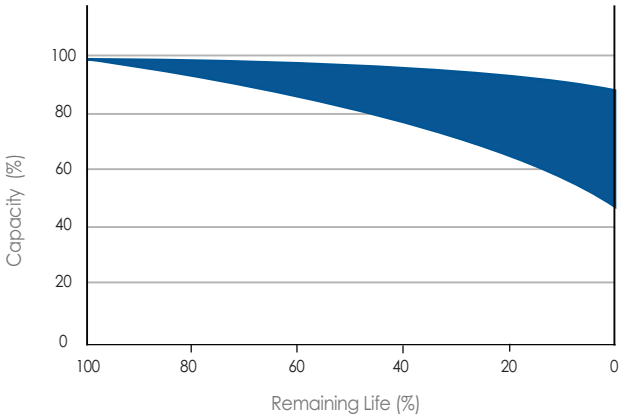
Discharge Characteristics (20˚C/68˚F)



Self-Discharge Characteristics

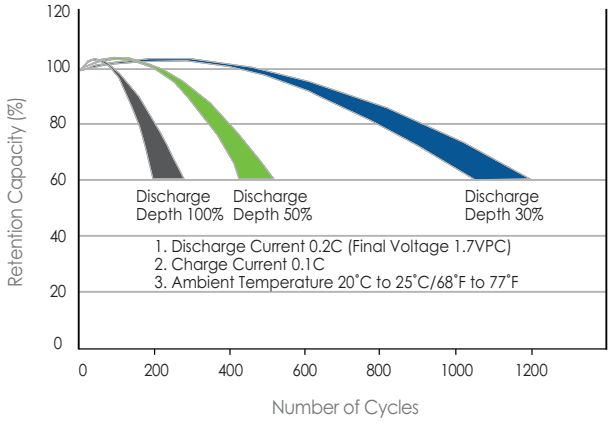


Life Characteristics in Stand-By Use

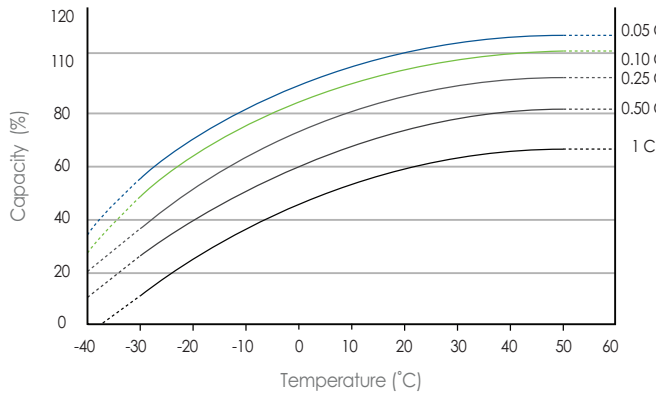


Life Characteristics in Cyclic Use

(Cyclic Models Only)



Temperature Effects on Capacity



Temperature Effects on Float Life