

DT12-180XS

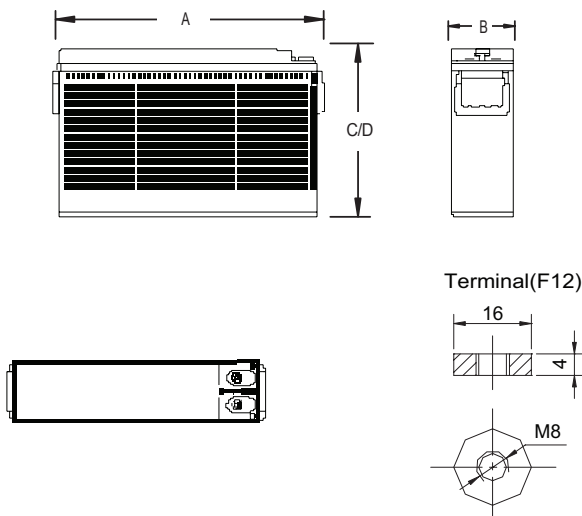
DATA SHEET



Float 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 broadband and CableTV (CATV), Uninterruptible Power Supplies (UPS), telecommunications, and electronics and security applications.

Mechanical Drawings



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
- Up to 12 year design life in float service

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	

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	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 Temperatures	-10°C (14°F) to 50°C (122°F)
Discharge Temperatures	-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
- EITS 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	-	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)

End Point V/C	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

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 seek 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



Temperature Effects on Capacity



Temperature Effects on Float Life

