RM12-100DC

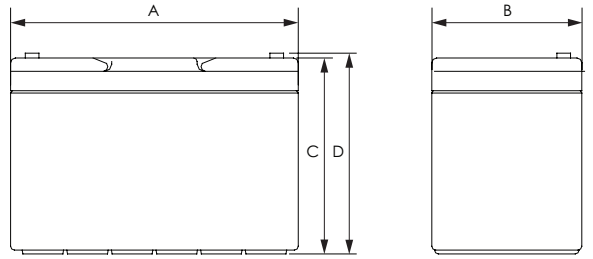
DATA SHEET

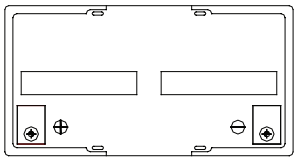
renewable energy manufacturing company

Cyclic AGM Battery Block

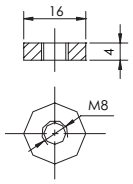
REMCO Deep Cycle Series VRLA Industrial Batteries provide superior high integrity and reliability with its maintenance-free Valve Regulated Lead Acid (VRLA) construction, making REMCO Deep Cycle Series the definitive choice for Solar/Renewable Energy, Marine and RV.

Mechanical Drawings



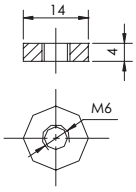


Terminal (F12)



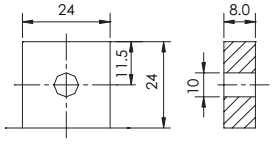
Terminal Torque
NM: 11 / Ft-lbs: 8

Optional Terminal (F11)



Terminal Torque
NM: 7 / Ft-lbs: 5

Optional Terminal (F17)



Terminal Torque
NM: 11 / Ft-lbs: 8

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)	12.1 in	306 mm
Width (B)	6.65 in	169 mm
Height (C)	8.19 in	208 mm
Total Height (D)	8.35 in	212 mm
Weight*	61.3 lbs	27.8 kgs
Terminal (Opt'l)	F12 (F11) (F17)	
Cells	6	
Electrolyte	AGM	

***NOTE:** There is a tolerance of +/-2%.

****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	6 mΩ
Short Circuit 20°C (68°F)	-
20 HR	100 Ah
10 HR	94 Ah
5 HR	82 Ah
1 HR	62 Ah
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)

The manufacturing facilities and products are certified to multiple standards:

- ISO, 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	300	205	165	96.8	62.0	25.6	17.8	9.80	5.10
1.65V	276	194	157	92.6	59.5	24.8	17.3	9.75	5.09
1.70V	252	182	148	88.2	56.9	24.0	16.8	9.70	5.08
1.75V	225	169	139	83.6	54.2	23.1	16.2	9.60	5.06
1.80V	198	154	129	78.8	53.4	22.1	15.5	9.40	5.00

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	528	372	304	186	138	117	68.2	48.4	33.8
1.65V	491	353	299	180	134	115	67.0	47.8	33.6
1.70V	454	335	290	176	132	113	65.8	47.3	33.3
1.75V	419	317	279	170	129	110	64.6	46.7	33.2
1.80V	381	296	270	164	126	107	63.9	45.9	32.9

Contact Us

HCB TECHNOLOGIES

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Updated: September 20th, 2016

Charge and Discharge

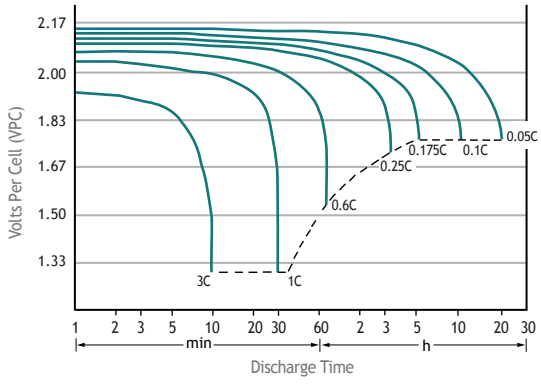
Max Charge / Discharge Currents	Peak (5 seconds)	Peak (10 seconds)	Max Continuous
Charge	1c20	0.75c20	0.25c20
Discharge	15c20	10c20	0.5c20

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.

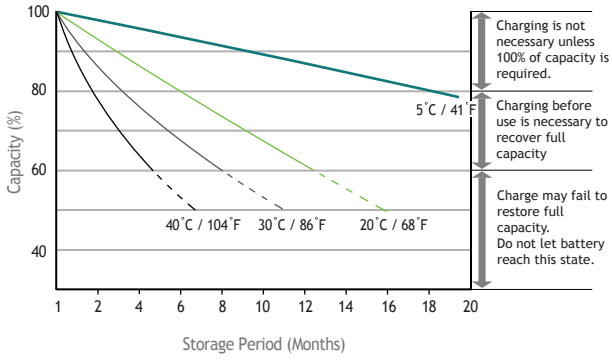
Cyclic Use: Limit initial currents to 0.25C20 amps. Charge until battery voltage reaches 2.40 to 2.45vpc. Hold at 2.40 to 2.45vpc until current drops to under 0.01C20 amps. Battery is fully charged under these conditions, and charger should be disconnected or switched to "float" voltage.

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

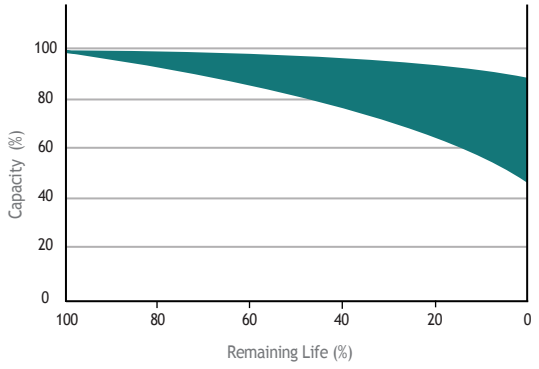
Discharge Characteristics (20˚C/68˚F)



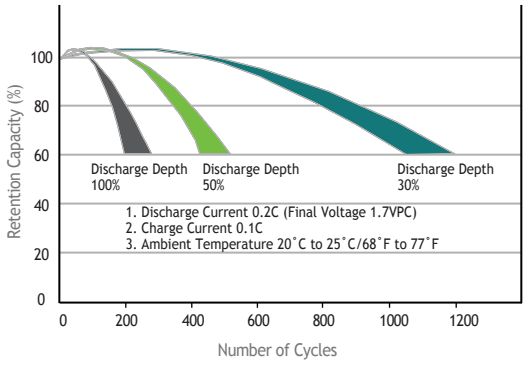
Self-Discharge Characteristics



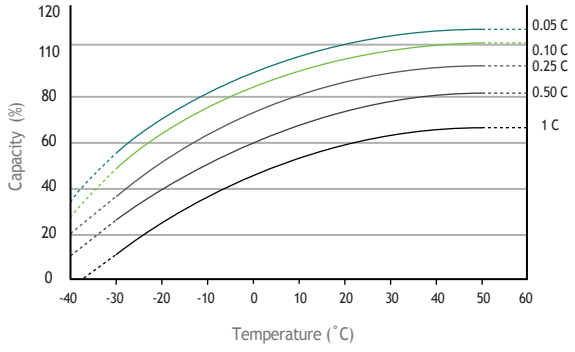
Life Characteristics in Stand-By Use



Life Characteristics in Cyclic Use (Cyclic Models Only)



Temperature Effects on Capacity



Temperature Effects on Float Life