

Absorbent Glass Mat (AGM) technology for superior performance. Valve regulated, spill proof construction allows safe operation in any position. Approved for transport by air. D.O.T., I.A.T.A., F.A.A. and C.A.B. certified. U.L. recognized under file number MH 20567.

Maintenance-Free



Due to continuous improvements to our products, product may vary slightly from depiction.

Specification

Nominal Voltage	12 volts		
Nominal Capacity	77° F (25° C)		
20-hr. (2.75A)	55.0 Ah		
10-hr. (5.12A)	51.2 Ah		
5-hr. (9.36A)	46.8 Ah		
1-hr. (33.0A)	33.0 Ah		
Approximate Weight	38.6 lbs (17.5 kgs)		
Internal Resistance (approx.)	10mΩ		
Shelf Life (% of normal capacity at 68° F (25° C))			
3 Months	6 Months	12 Months	
91%	83%	64%	
Temperature Dependency of Capacity	(20 hour rate)		
104° F (40°C)	77° F (25°C)	32° F (0°C)	5° F (-15°C)
102%	100%	85%	65%
AGM Operational Temperature			
Charge	32°F to 104°F (0°C to 40°C)		
Discharge	5°F to 113°F (-15°C to 45°C)		
AGM Storage Temperature	5°F to 104°F (-15°C to 40°C)		

Charge Method (Constant Voltage)

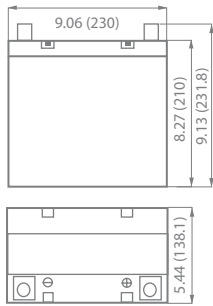
Cycle Use (Repeating Use)

Initial Current	16.5 A or smaller
Control Voltage	14.6 - 14.8 V

Float Use

Control Voltage	13.6 - 13.8 V
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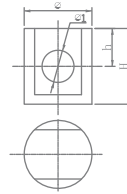
Physical Dimensions: in (mm)



L: 9.06 in (230 mm)
W: 5.44 in (138.1 mm)
H: 8.27 in (210 mm)
TH: 9.13 in (231.8 mm)

Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

Terminals



Z Series (Z Post Terminal)

Dimension Type	∅	∅1	H	h
Z1	17.0	8.0	21.5	9.0

Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	182.8	133.4	93.9	56.8	29.6	17.3	12.7	9.9	8.2	5.7	5.2	2.8
10.20V	161.0	121.5	84.0	53.8	27.9	16.5	12.4	9.6	8.0	5.6	5.0	2.7
10.50V	155.1	115.6	79.0	52.4	27.2	16.1	12.1	9.5	7.9	5.6	4.9	2.7
10.80V	149.2	109.7	74.1	50.9	26.2	15.7	11.8	9.3	7.7	5.4	4.9	2.7
11.10V	143.3	103.7	69.2	49.4	25.2	15.3	11.4	9.0	7.5	5.3	4.7	2.5

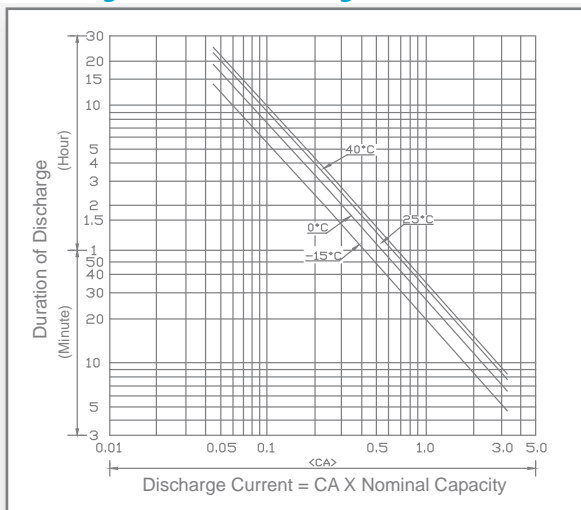
Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	1940.9	1465.7	996.9	603.2	343.3	200.1	147.2	114.6	94.4	66.7	60.3	32.5
10.20V	1787.8	1349.1	932.2	597.7	322.6	191.2	143.3	111.6	94.1	65.2	58.8	31.6
10.50V	1759.1	1311.1	896.1	593.8	312.2	186.7	139.8	109.7	91.4	64.7	57.8	31.2
10.80V	1736.4	1276.5	862.5	592.3	303.8	182.8	136.8	107.7	89.9	63.2	57.3	31.1
11.10V	1704.8	1234.5	823.0	587.9	299.9	182.3	135.4	107.2	89.4	62.7	55.8	30.1

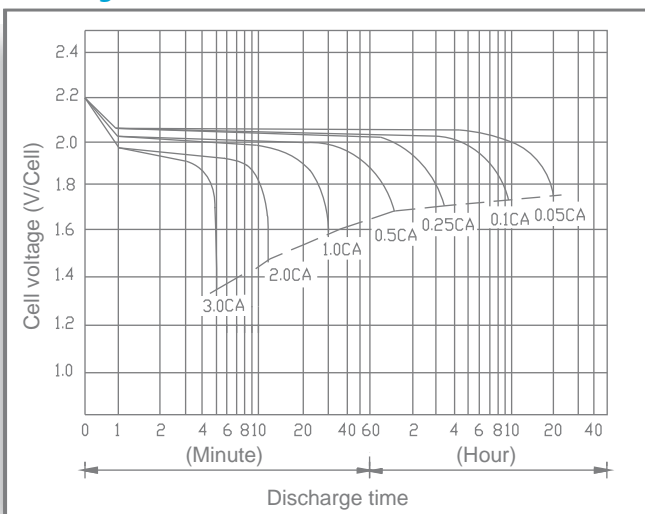


ISO 9001

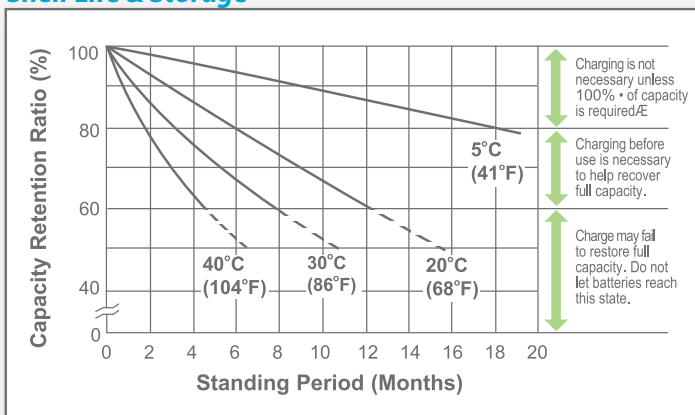
Discharge Time vs. Discharge Current



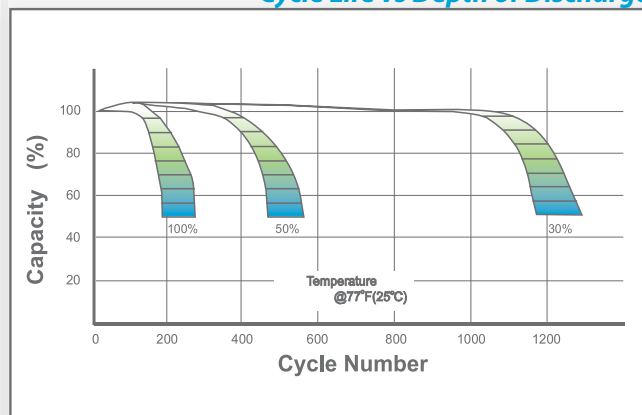
Discharge Characteristics



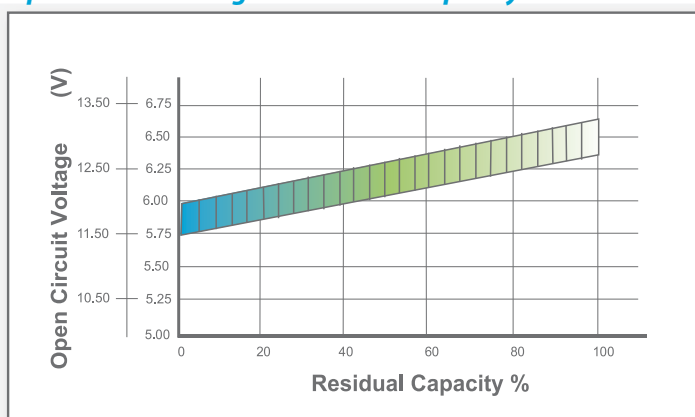
Shelf Life & Storage



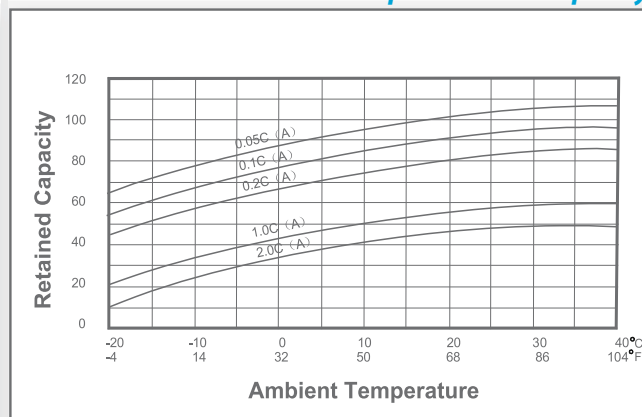
Cycle Life vs Depth of Discharge



Open Circuit Voltage vs Residual Capacity



Effect of Temperature on Capacity



Charge Current & Final Discharge Voltage

Application	Charge Voltage(V/Cell)			Max.Charge Current	Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
	Temperature	Set Point	Allowable Range						
Cycle Use	25°C(77°F)	2.45	2.43-2.47	0.30C	Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C
Standby	25°C(77°F)	2.28	2.27-2.30						



Let UPG Power Your Life.

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