

Gelled Silica technology for superior performance. Valve regulated, spill proof construction 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

**Specification**

<b>Nominal Voltage</b>	12 volts		
<b>Nominal Capacity</b>	77° F (25° C)		
20-hr. (3.75A)	75.0 Ah		
10-hr. (6.97A)	69.7 Ah		
5-hr. (12.75A)	63.75 Ah		
1-hr. (45.00A)	45.0 Ah		
<b>Approximate Weight</b>	47.4 lbs (21.5 kgs)		
<b>Internal Resistance (approx.)</b>	10mΩ		
<b>Shelf Life</b> (% of normal capacity at 77° F (25° C))			
3 Months	6 Months	12 Months	
91%	82%	64%	
<b>Temperature Dependency of Capacity</b>	(20 hour rate)		
104° F	77° F	32° F	5° F
102%	100%	85%	65%



**Charge Method** (Constant Voltage)

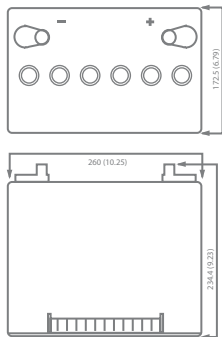
**Cycle Use** (Repeating Use)

Initial Current	15 A or smaller
Control Voltage	14.2 - 14.4 V

**Float Use**

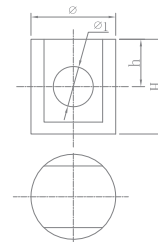
Control Voltage	13.2 - 13.4 V
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**Physical Dimensions: in (mm)**



**L:** 10.25 in (260 mm)  
**W:** 6.79 in (172.5 mm)  
**TH:** 9.23 in (234.4 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) Offset Z**

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

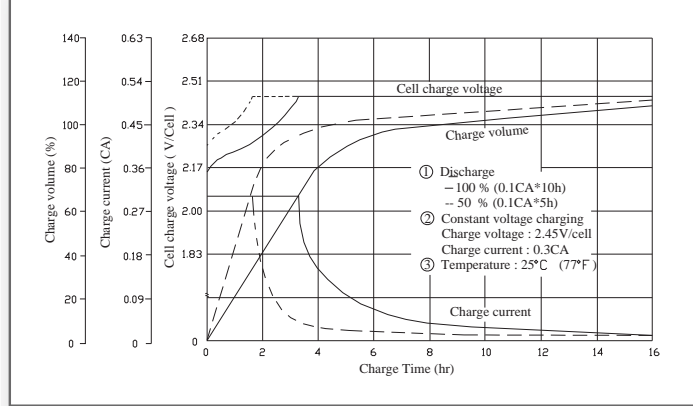
**Constant Power Discharge Characteristics Unit:A (25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	20MIN	30MIN	40MIN	50MIN	60MIN	90MIN
1.75V	357	262	213	182	140	114	96	84	58
1.70V	378	280	224	186	143	117	98	84	59
1.65V	399	296	234	193	146	119	100	86	61
1.60V	412	304	241	199	148	121	102	87	62

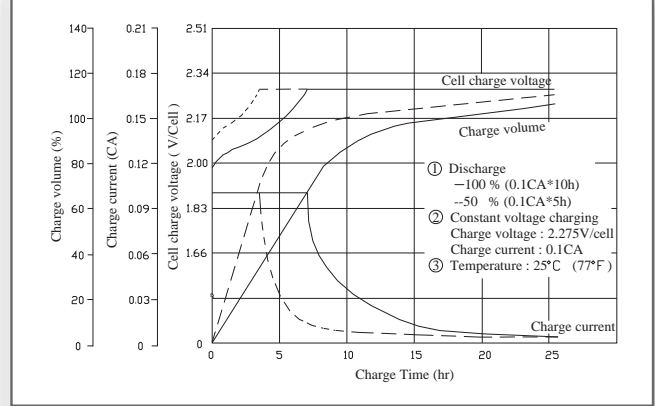
**Constant Current Discharge Characteristics Unit:W (25°C, 77°F)**

F.V/Time	5MIN	10MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	6HR	7HR	8HR	10HR	20HR	24HR
1.90V	109	77	52	32	20.2	14.7	11.8	10.3	8.4	7.4	6.7	5.9	3.0	2.5
1.85V	142	95	64	37	22.0	16.0	12.6	11.0	9.0	7.9	7.1	6.2	3.2	2.7
1.80V	168	105	69	40	22.4	16.9	13.3	11.6	9.5	8.3	7.5	6.3	3.4	2.9
1.75V	191	113	73	42	23.8	17.5	13.7	11.9	9.8	8.6	7.7	6.5	3.75	2.9

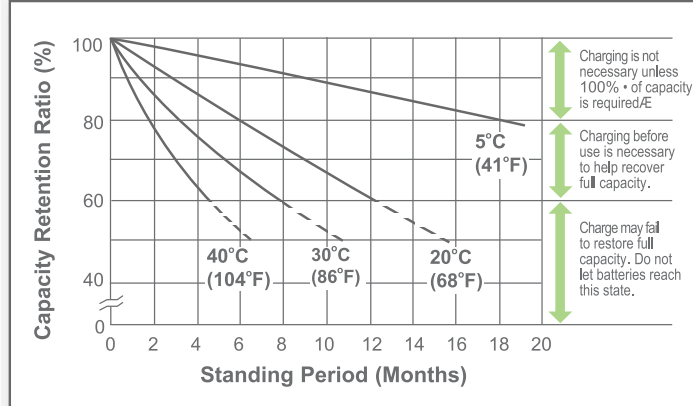
### Battery Charging Characteristics for Cyclic Use



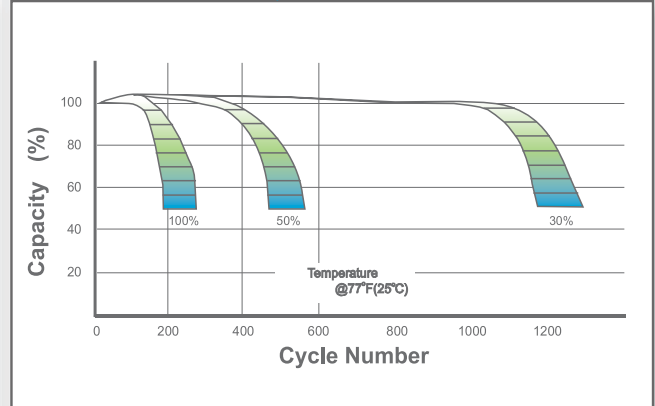
### Battery Charging Characteristics for Standby Use



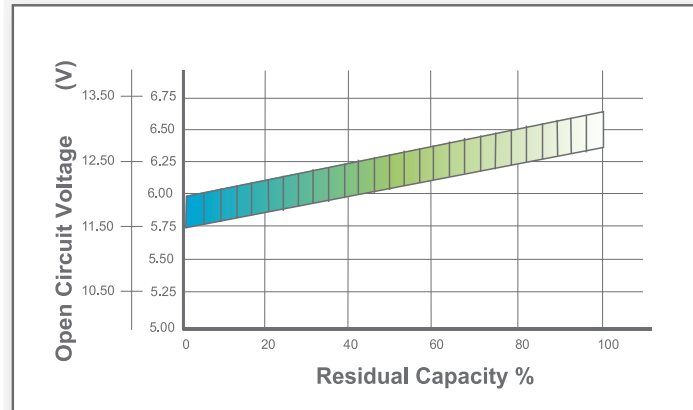
### Shelf Life & Storage



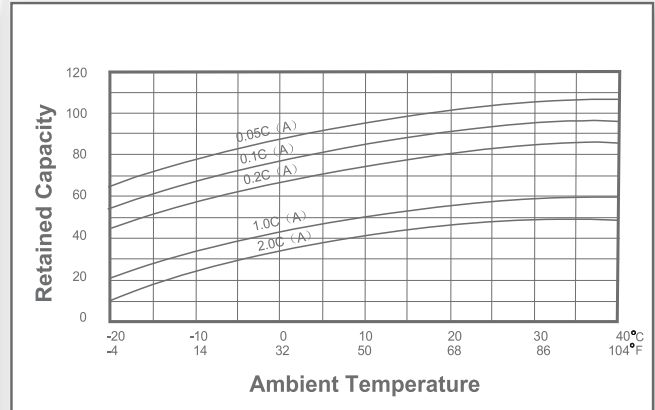
### Cycle Life vs Depth of Discharge



### 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)	2.4	2.40-2.50	.2C	Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C
Standby	25°C(77°F)	2.23	2.27-2.30						



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