

UPG Sealed Lead-Acid Battery

STAY POWERED®

Absorbant 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.

UPG No. 40696

UB12220

Maintenance-Free

Specification

Nominal Voltage		12 volts	
Nominal Capacity		77° F (25° C)	
20-hr. (1.10A)		22.0 Ah	
10-hr. (2.05A)		20.5 Ah	
5-hr. (3.74A)		18.7 Ah	
1-hr. (13.2A)		13.2 Ah	
Approximate Weight		13.01 lbs (5.9 kgs)	
Internal Resistance (approx.)		11mOHMS	
Shelf Life (% of normal capacity at 68° F (20° 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)	



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

Charge Method (Constant Voltage)

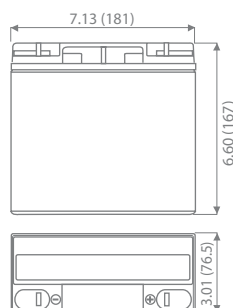
Cycle Use (Repeating Use)

Initial Current	6.6 A or smaller
Control Voltage	14.6 - 14.8 V

Float Use

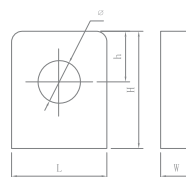
Control Voltage	13.6 - 13.8 V
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Physical Dimensions: in (mm)



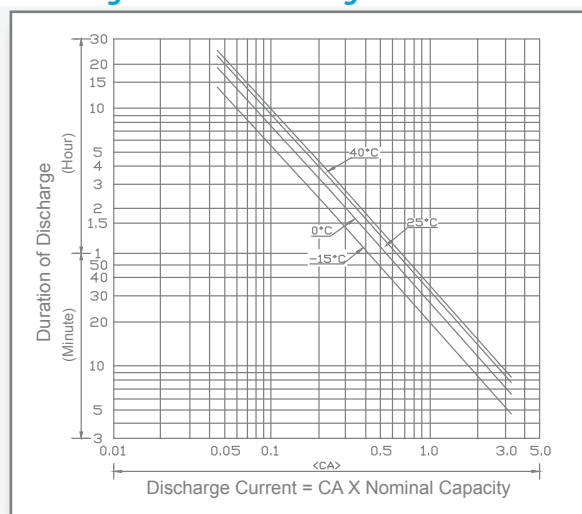
L: 7.13 in (181 mm)
W: 3.01 in (76.5 mm)
H: 6.60 in (167 mm)
 Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

Terminals

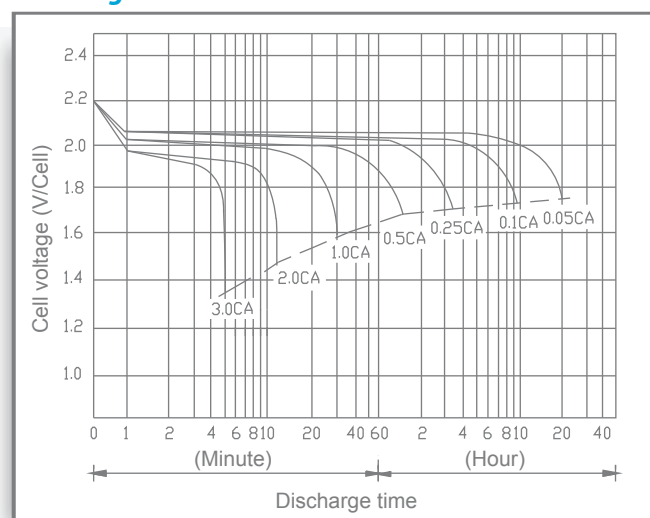


Dimension Type	L	W	H	h	φ
T4	12.3	3	12.5	5	5.5

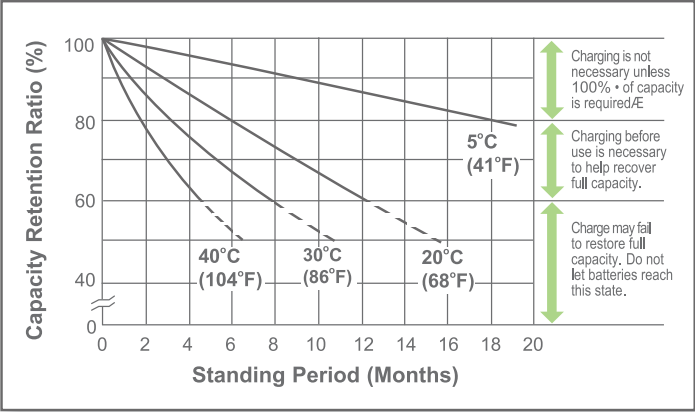
Discharge Time vs. Discharge Current



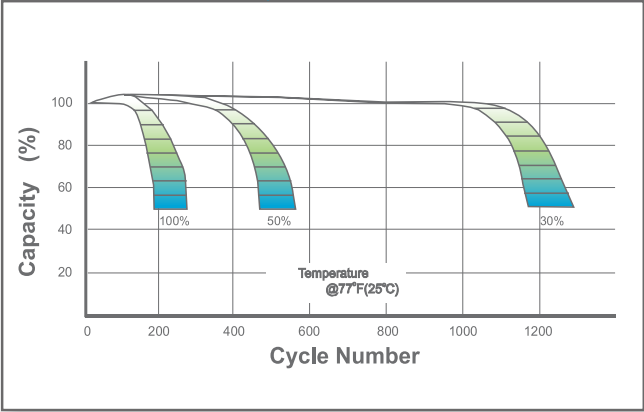
Discharge Characteristics



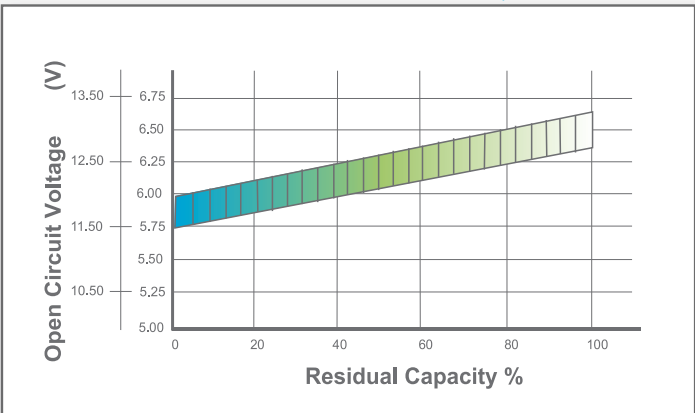
Shelf Life & Storage



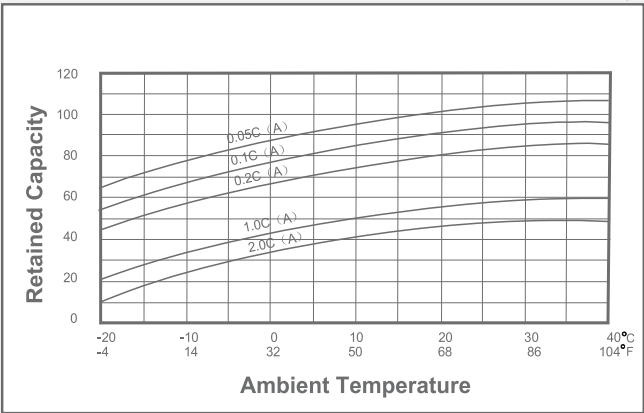
Cycle Life vs Depth of Discharge



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		Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C
Cycle Use	25°C(77°F)	2.45	2.43~2.47	0.30C					
Standby	25°C(77°F)	2.28	2.27~2.30						