



### General Features

- ◆ Sealed and maintenance free operation.
- ◆ Non-Spillable construction design.
- ◆ ABS containers and covers(UL94HB, UL94V-0) optional.
- ◆ Safety valve installation for explosion proof.
- ◆ High quality and high reliability.
- ◆ Exceptional deep discharge recovery performance.
- ◆ Low self discharge characteristic.
- ◆ Flexibility design for multiple install positions.



Battery Type	Valve-Regulated,Absorbed Glass Mat(AGM) Technology			
Nominal Voltage	12V			
Capacity( 20°C)	20HR(1.44A,1.8V/cell)	10HR(2.72A,1.80V)	5HR(4.66A,1.75V)	1HR(16.4A,1.60V)
	28.8AH	2.72AH	23.3AH	16.4AH
Dimensions	Length	Width	Height	Total Height
	165mm(6.50inches)	125mm(4.92inches)	175mm(6.89inches)	175mm(6.89inches)
Approx Weight	Approx 9.5 kg (20.9lbs)			
Internal Resistance	Full Charged at 20°C: Approx 12m Ω			
Self Discharge	3% of capacity declined per month at 20°C			
Capacity affected by Temperature (10HR)	40°C	25°C	0°C	-15°C
	103%	100%	86%	65%
Charging Voltage (V)	Cycle use		Float use	
	14.4V~15.0V at 20 °C. T emp. Coefficient -30mV/ °C		13.5V~13.8V at 20 °C.Temp. Coefficient (-20mV/ °C)	
Current	Max. Discharge Current		Initial Charging Current	
	420A		Less than 8.4A	
Operating T emp.Range	Discharge		Charging	
	-15~50°C (5 ~122°F)		0~40°C (32 ~104°F)	
	Storage			
			-15 ~40°C (5 ~104°F)	

### Constant Current Discharge (A mperes) at 20 °C(68°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	34.3	28.6	24.4	19.9	15.1	12.6	8.15	6.46	5.23	4.23	3.75	3.00	2.56	1.43
1.80V/cell	43.8	34.6	28.8	23.5	17.5	14.2	8.90	6.95	5.59	4.54	4.03	3.19	2.72	1.44
1.75V/cell	48.2	37.8	31.0	24.4	18.2	14.8	9.23	7.08	5.73	4.66	4.13	3.24	2.74	1.45
1.70V/cell	52.5	40.3	32.6	25.4	18.9	15.3	9.59	7.28	5.87	4.78	4.22	3.29	2.77	1.48
1.65V/cell	56.7	42.9	34.6	26.8	19.4	15.8	9.86	7.59	6.07	4.91	4.31	3.34	2.83	1.50
1.60V/cell	61.5	45.9	36.9	28.3	20.2	16.4	10.2	7.82	6.26	5.08	4.41	3.37	2.86	1.51

### Constant Power Discharge (Watts) at 20 °C (68°F)

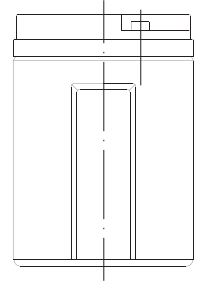
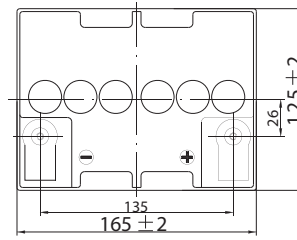
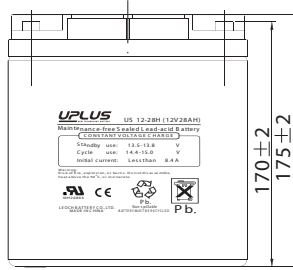
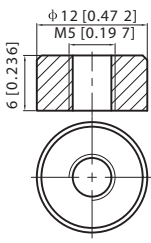
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	64.6	54.4	46.9	38.7	29.5	24.8	16.1	12.8	10.4	8.44	7.51	6.03	5.16	2.87
1.80V/cell	81.6	64.9	54.6	45.0	34.1	27.7	17.5	13.7	11.1	9.02	8.02	6.38	5.46	2.90
1.75V/cell	88.2	70.0	58.2	46.3	35.0	28.8	18.1	13.9	11.3	9.23	8.21	6.48	5.51	2.92
1.70V/cell	94.0	73.7	60.7	47.9	36.3	29.6	18.7	14.3	11.6	9.45	8.37	6.56	5.56	2.97
1.65V/cell	100.5	77.8	64.0	50.2	36.9	30.4	19.1	14.8	11.9	9.68	8.53	6.65	5.67	3.01
1.60V/cell	106.7	81.9	67.4	52.6	38.2	31.3	19.7	15.2	12.2	9.97	8.69	6.70	5.72	3.02



# Dimensions

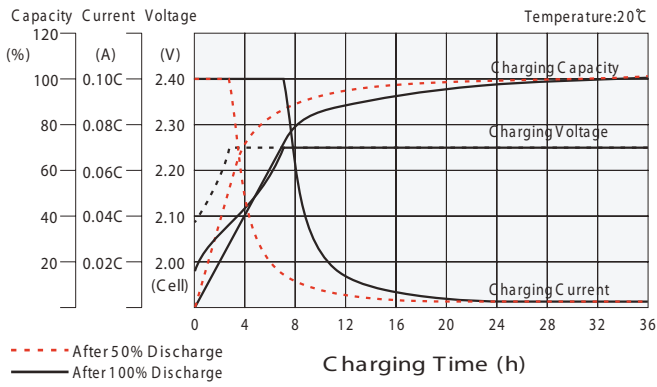
## T1 2 Terminal

Unit: mm [inches]

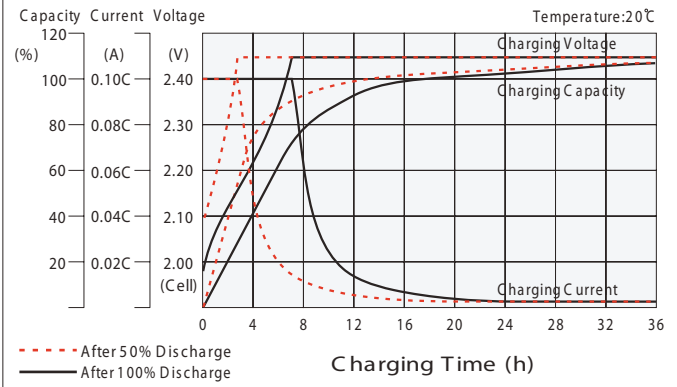


Torque: 2.0~3.0N\*M

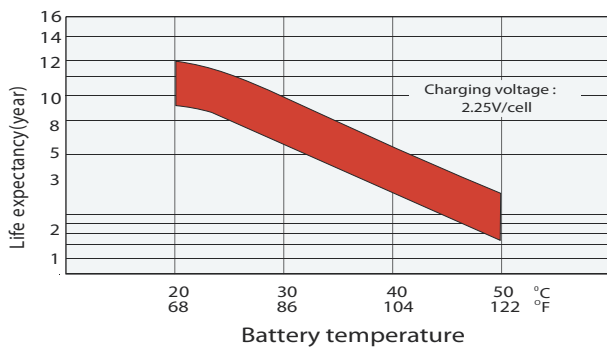
## Float charging characteristics



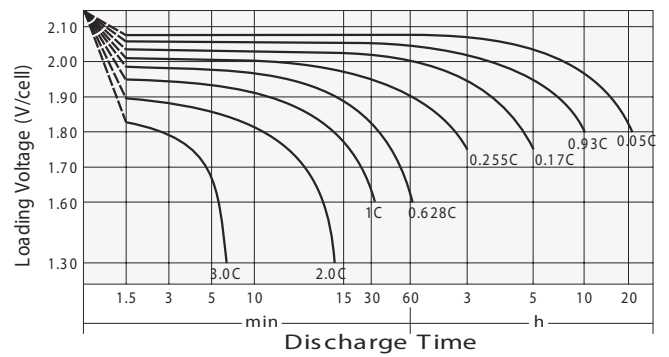
## Cycle use charging characteristics



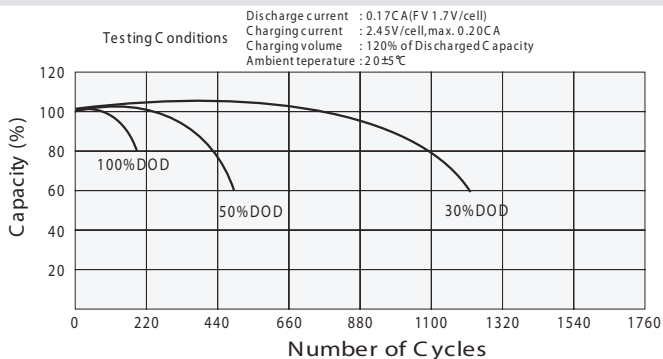
## Effect of Temperature on Long Term Float Life



## Discharge characteristics



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics

