



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(1.03A, 1.8V/cell)	10HR(1.94A, 1.80V)	5HR(3.33A, 1.75V)	1HR(11.7A, 1.60V)
	20.6AH	19.4AH	16.6AH	11.7AH
Dimensions	Length	Width	Height	Total Height
	181.5mm(7.14inches)	77mm(3.03inches)	167.5mm(6.59inches)	167.5mm(6.59inches)
Approx Weight	Approx 6.0 kg (13.2lbs)			
Internal Resistance	Full Charged at 20°C : Approx 15m 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. Temp. Coefficient -30mV/°C		13.5V~13.8V at 20°C. Temp. Coefficient (-20mV/°C)	
Current	Max. Discharge Current		Initial Charging Current	
	300A		Less than 6.0A	
Operating Temp. 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 (Amperes) 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	24.5	20.4	17.4	14.2	10.8	9.03	5.82	4.61	3.74	3.02	2.68	2.14	1.83	1.02
1.80V/cell	31.3	24.7	20.6	16.8	12.5	10.1	6.36	4.97	3.99	3.24	2.88	2.28	1.94	1.03
1.75V/cell	34.4	27.0	22.2	17.4	13.0	10.6	6.59	5.06	4.09	3.33	2.95	2.31	1.96	1.04
1.70V/cell	37.5	28.8	23.3	18.2	13.5	10.9	6.85	5.20	4.19	3.41	3.01	2.35	1.98	1.06
1.65V/cell	40.5	30.6	24.7	19.2	13.9	11.3	7.04	5.42	4.33	3.51	3.08	2.38	2.02	1.07
1.60V/cell	43.9	32.8	26.4	20.2	14.4	11.7	7.28	5.58	4.47	3.63	3.15	2.41	2.04	1.08

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

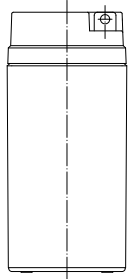
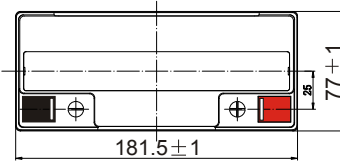
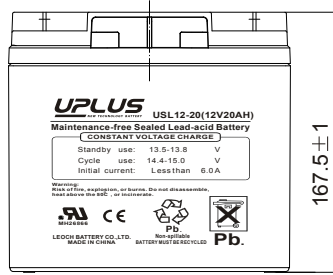
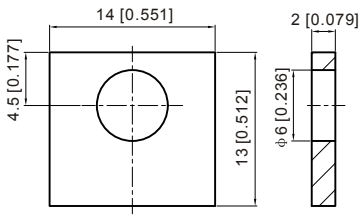
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	46.1	38.9	33.5	27.6	21.1	17.7	11.5	9.16	7.44	6.03	5.36	4.31	3.69	2.05
1.80V/cell	58.3	46.3	39.0	32.1	24.3	19.8	12.5	9.80	7.90	6.45	5.73	4.56	3.90	2.07
1.75V/cell	63.0	50.0	41.5	33.1	25.0	20.6	12.9	9.94	8.07	6.59	5.87	4.63	3.94	2.09
1.70V/cell	67.1	52.7	43.3	34.2	25.9	21.2	13.4	10.2	8.25	6.75	5.98	4.69	3.97	2.12
1.65V/cell	71.8	55.6	45.7	35.8	26.3	21.7	13.7	10.6	8.50	6.91	6.09	4.75	4.05	2.15
1.60V/cell	76.2	58.5	48.2	37.6	27.3	22.4	14.1	10.9	8.74	7.12	6.21	4.79	4.08	2.16



Dimensions

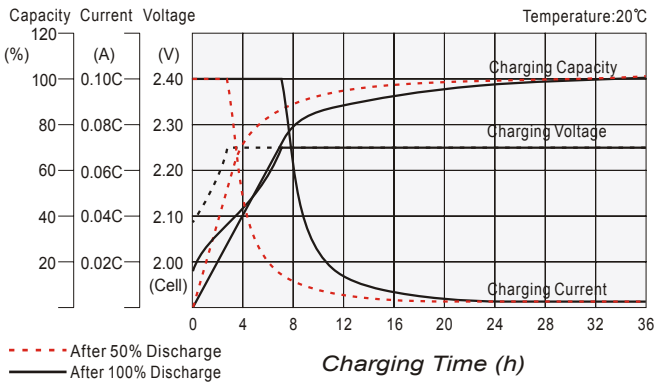
T3 Terminal

Unit: mm [inches]

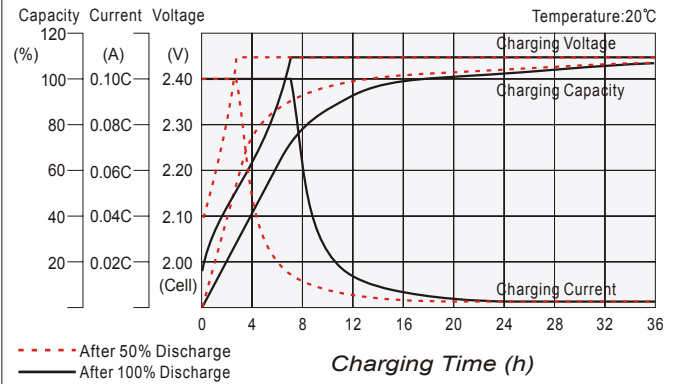


Torque: 3.9~5.4N*M

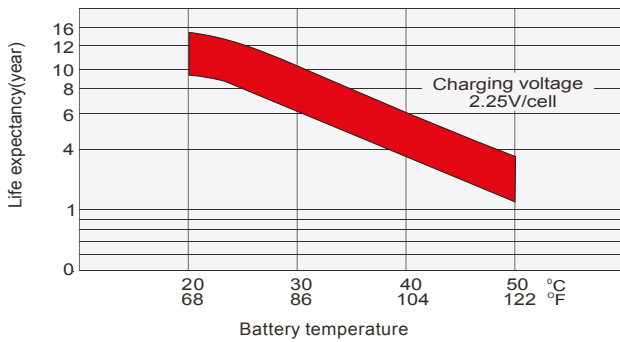
Float charging characteristics



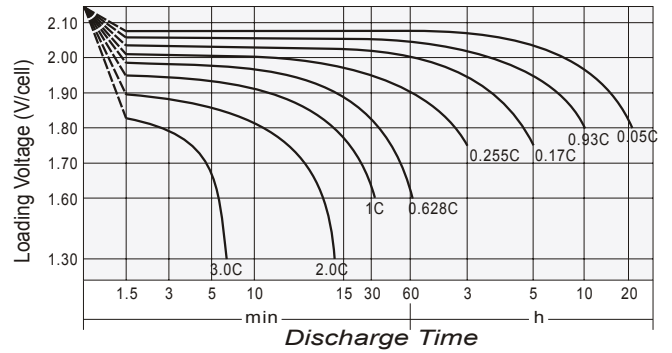
Cycle use charging characteristics



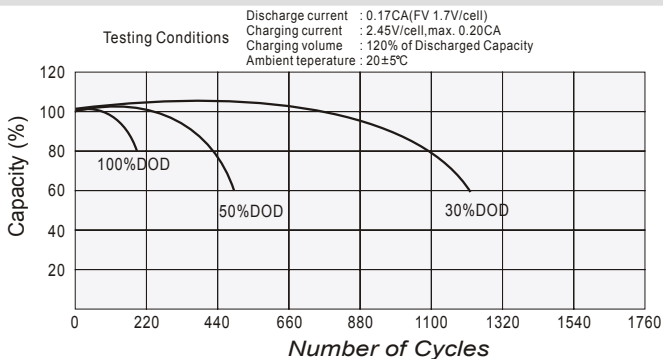
Effect of Temperature on Long Term Float Life



Discharge characteristics



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics

