



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(25 °C)	20HR(6.78A, 1.8V/cell)	10HR(13.0A, 1.8V/cell)	5HR(23.6A, 1.75V/cell)	1HR(88.8A, 1.6V/cell)
	137.4AH	130.0AH	118.0AH	88.8AH
Dimensions	Length	Width	Height	Total Height
	551mm(21.69inches)	110mm(4.33inches)	287mm(11.3inches)	287mm(11.3inches)
Approx Weight	Approx 41.5 Kg (91.5lbs)			
Internal Resistance	Full Charged at 25 °C : Approx 3.2mΩ			
Self Discharge	3% of capacity declined per month at 25 °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 25 °C. Temp. Coefficient -30mV/ °C		13.5V~13.8V at 25 °C. Temp. Coefficient -20mV/ °C	
Current	Max. Discharge Current(5s)		Initial Charging Current	
	1100A		Less than 37.5A	
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 25 °C (77 °F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	217.4	181.2	155.5	122.0	94.6	76.9	45.9	33.0	26.5	21.9	19.1	14.9	12.4	6.57
1.80V/cell	246.5	202.0	172.1	133.5	101.8	82.1	48.4	35.1	27.9	23.1	20.1	15.6	13.0	6.87
1.75V/cell	270.5	218.6	183.7	140.3	105.7	85.0	49.3	35.7	28.6	23.6	20.4	15.8	13.1	6.98
1.70V/cell	289.3	230.2	191.1	144.4	108.1	86.1	50.0	36.1	28.8	23.8	20.6	16.0	13.3	7.03
1.67V/cell	299.4	236.0	195.0	146.2	108.5	86.5	50.1	36.3	29.0	24.0	20.9	16.3	13.4	7.06
1.60V/cell	314.7	245.0	203.8	149.9	111.4	88.8	51.0	37.0	29.6	24.6	21.3	16.6	13.6	7.10

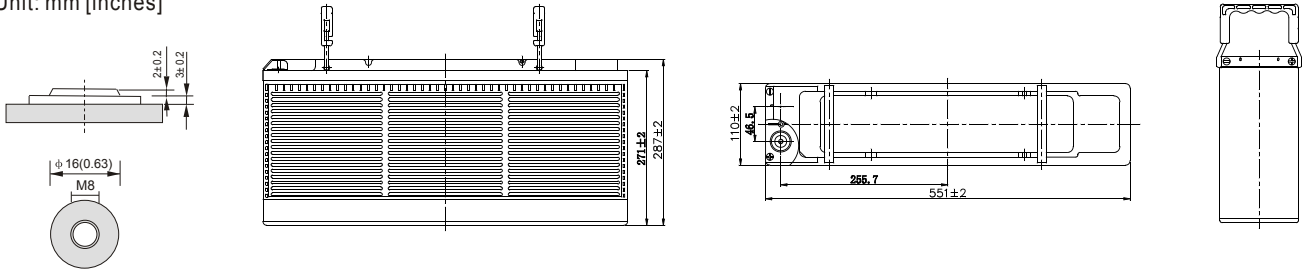
Constant Power Discharge (Watts) at 25 °C (77 °F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	405.9	341.8	296.3	234.9	183.7	149.9	90.0	65.0	52.4	43.5	37.9	29.7	24.8	13.2
1.80V/cell	454.8	375.8	323.1	253.2	196.1	159.1	94.3	68.8	54.8	45.5	39.7	31.1	25.9	13.7
1.75V/cell	491.2	401.8	341.6	263.9	201.7	164.0	95.7	69.6	56.0	46.4	40.2	31.4	26.2	13.9
1.70V/cell	513.7	417.4	352.7	270.1	203.6	165.7	96.9	70.2	56.3	46.5	40.6	31.8	26.4	14.0
1.67V/cell	529.5	426.0	358.5	273.0	205.6	166.0	97.0	70.4	56.6	47.0	41.0	32.2	26.6	14.1
1.60V/cell	541.3	433.6	369.3	276.2	208.8	168.6	97.8	71.4	57.5	48.0	41.6	32.8	27.1	14.1

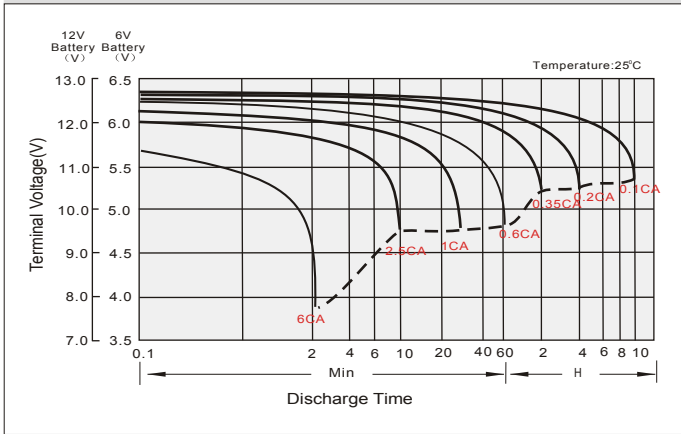
Dimensions

Terminal

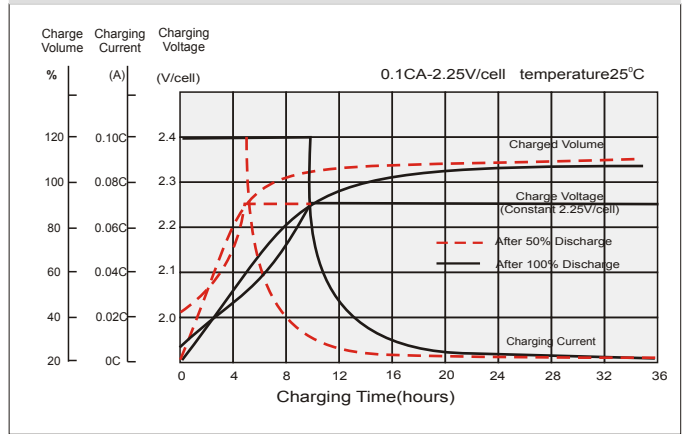
Unit: mm [inches]



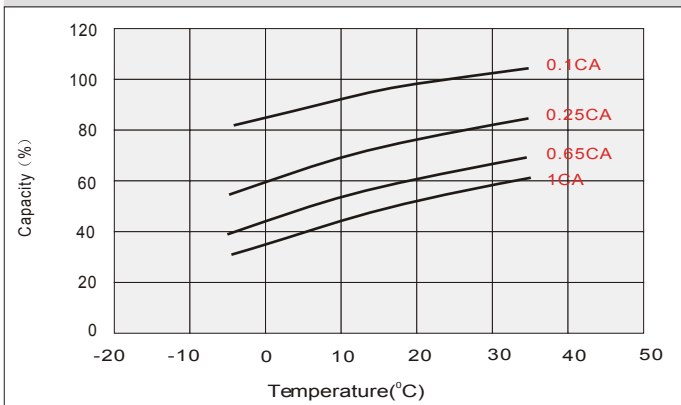
Discharge characteristics



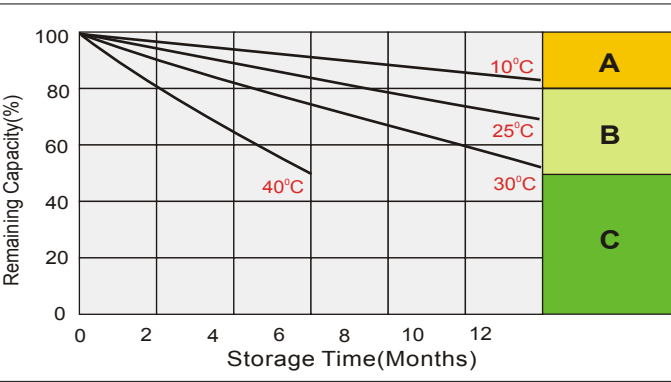
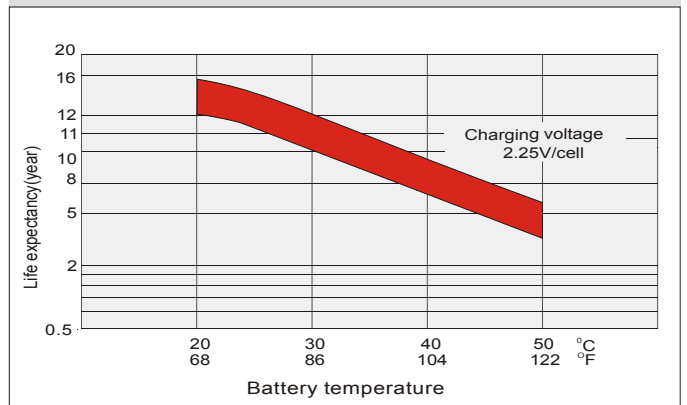
Cycle use charging characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
 3. Charged for 8-10hours at limited current 0.05CA .
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.