



Application

- Solar Energy System
- Golf Cars and Buggies
- Electric Powered Vehicles
- Wheel Chairs
- Power Tools
- Electric Powered Toys
- Control System
- Vacuum Cleaners
- Medical Equipments
- UPS

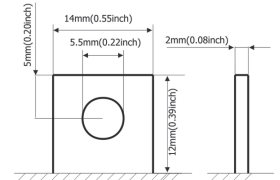
General Features

- 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.

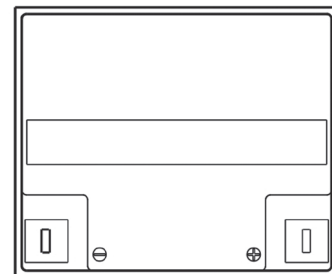
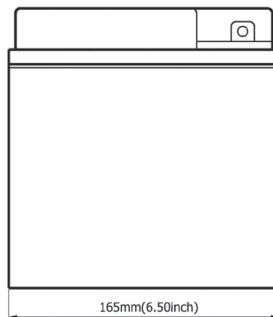
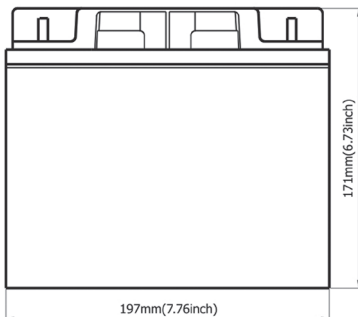
Construction

- Component **Raw material**
- Positive **Lead dioxide**
- Negative **Lead**
- Container **ABS**
- Cover **ABS**

- Sealant **Epoxy Resin**
- Safety valve **EPDR**
- Terminal **Copper**
- Separator **Fibre glass**
- Electrolyte **Sulfuric acid**



Terminal Dimensions

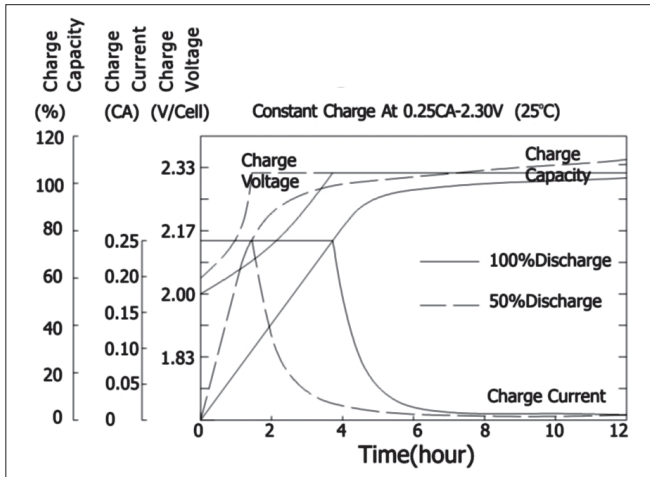


Battery Model

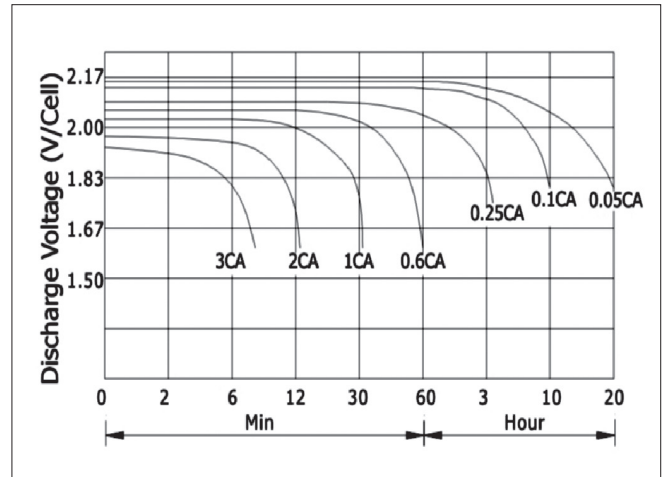
ESC38-12

Designed Cycle Life	> 350 cycles @ -0.5CA to 9.6V			
Capacity(25 °C)	20HR(1.95A,1.75V)	10HR(3.8A,1.75V)	5HR(6.46A,1.75V)	1HR(22.8A,1.75V)
	39AH	38AH	32,3AH	22,8AH
Dimensions	Length	Width	Height	Total Height
	197mm(7.76inch)	165mm(6.50inch)	171mm(6.73inch)	171mm(6.73inch)
Approx. Weight	13.6Kg (30.0 lbs)			
Internal Resistance	Full charged at 25 °C: 0.0095 Ohm			
Self Discharge	3% of capacity declined per month at (25 °C)			
Capacity Affected by Temp.(20HR)	40 °C	25 °C	0 °C	-15 °C
	102%	100%	85%	65%
Charge Voltage(25 °C)	Cycle use		Float use	
	14.4-15V(-30mV/ °C), max. Current: 9.5A		13.6-13.8V(-20mV/ °C)	

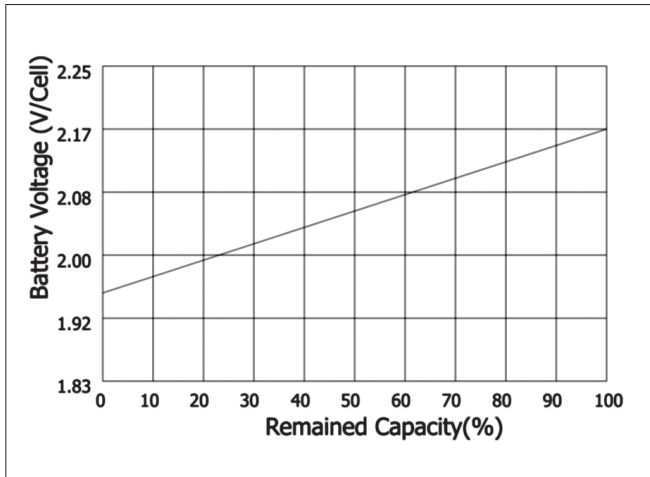
Charge Characteristic



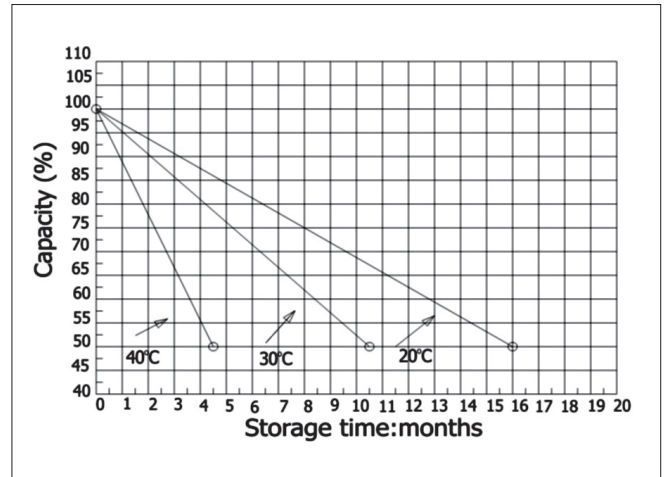
Discharge Characteristic (25 °C)



Relationship of OCV and state of charge



Cycle service life in relation to depth of discharge



Constant current discharge ratings-amperes at 25 °C

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	183	114	86,0	52,4	28,4	12,5	7,63	4,15	2,24
1.67V	172	108	82,7	50,1	28,1	12,0	7,47	4,11	2,17
1.70V	158	104	80,8	45,6	27,2	11,2	7,31	4,10	2,13
1.75V	154	101	78,2	43,3	25,9	10,8	7,15	4,08	2,08
1.80V	138	96,4	71,0	40,1	24,3	10,4	6,72	4,00	2,02
1.85V	122	91,8	63,8	36,9	22,6	10,0	6,29	3,95	1,98

Constant power discharge ratings-watts at 25 °C

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	321	206	157	94,4	51,3	22,1	12,9	8,53	4,48
1.67V	310	201	155	92,5	51	21,4	12,8	8,48	4,32
1.70V	292	199	154	86,6	50,0	20,5	12,7	8,43	4,27
1.75V	294	198	152	84,0	49,2	20,0	12,6	8,32	4,16
1.80V	269	195	141	80,1	46,3	19,4	12,2	8,07	4,05
1.85V	244	185	128	75,0	43,6	18,8	11,8	7,98	4,00