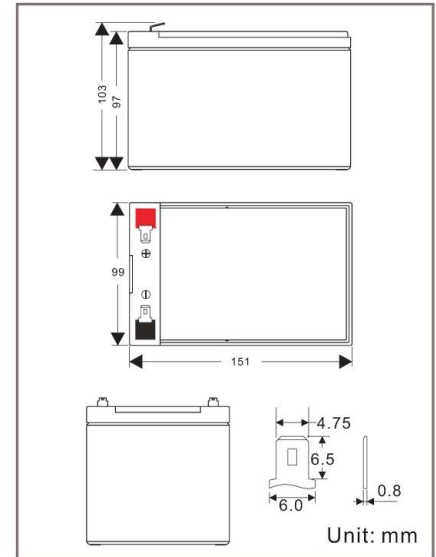


SLA BATTERY—ELECTRIC VEHICLE SERIES

Specification

Nominal Voltage	12V	
Number of cell	6	
Nominal Capacity	12Ah@ 2hr-rate (6.0 A to 1.75V/cell @25°C)	
Dimensions	Length	151±2mm (5.94 inches)
	Width	99±2mm (3.90 inches)
	Height	97±2mm (3.82 inches)
	Total Height	103±2mm (4.06 inches)
Weight	Approx. 4.5Kg	
Terminal	F2	
Rated Capacity	17Ah	20hr-rate (0.85A to 1.80V/cell @20°C)
	16Ah	10hr-rate (1.6A to 1.80V/cell @25°C)
	12.0Ah	2hr-rate (6.0A to 1.75V/cell @25°C)
	11.5Ah	1hr-rate (11.5A to 1.75V/cell @25°C)
Minutes of discharge	>55min 12A discharge to 1.75V/cell @25°C	
5A discharge characteristic	>140min to 1.75V/cell @25°C	
	>112min to 1.75V/cell @-10°C	
Max. Discharge Current	170A(5sec)	
Internal Resistance	Approx. 16mΩ(Fully charged)	
Operating Temp. Range	Discharge: -20°C~60°C	
	Charge : -15°C~60°C	
	Storage : -20°C~60°C	
Normal Operating Tem. Range	25±5°C	
Cycle Use	Charging Current: ≤3.0A	
	Voltage: 14.6V~14.8V	
	Temperature compensation: -30mV/°C	
Standby Use	Charging Current: No limit	
	Voltage: 13.6V~13.8V	
	Temperature compensation: -20mV/°C	
Design Life	10 years (floating charge)	



Applications

- ◆ Electric Vehicle
- ◆ Aerial Lifts and Fork Lifts
- ◆ Floor Machines and Robotics
- ◆ Electronic and Security
- ◆ Broadband and Cable TV (CATV)
- ◆ Power generation system (solar and wind power system, etc.)
- ◆ Mobility and Home Medical Equipment
- ◆ Electric Power System (EPS)
- ◆ Uninterruptable Power System (UPS)
- ◆

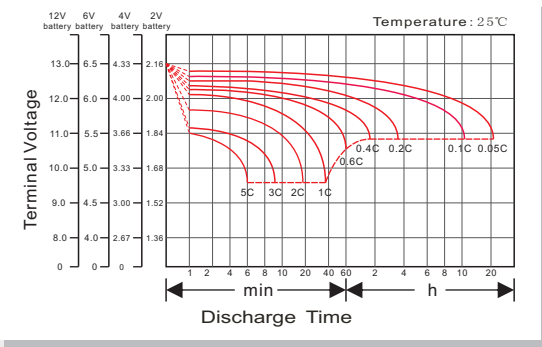
Constant Current Discharge Characteristics: A (20°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	69.13	46.20	35.53	20.53	12.15	6.330	4.480	3.675	3.046	2.021	1.749	0.982
1.65V/cell	66.63	44.40	34.39	20.21	12.08	6.285	4.463	3.658	3.028	2.013	1.731	0.946
1.70V/cell	63.03	43.03	33.60	20.06	11.99	6.270	4.445	3.640	3.010	2.004	1.714	0.928
1.75V/cell	56.94	40.27	31.85	19.60	11.81	6.193	4.428	3.623	2.992	1.996	1.696	0.893
1.80V/cell	50.85	37.52	30.08	19.13	11.64	6.087	4.393	3.605	2.974	1.988	1.660	0.857
1.85V/cell	44.81	34.76	28.33	18.66	11.48	5.996	4.358	3.588	2.956	1.980	1.642	0.839

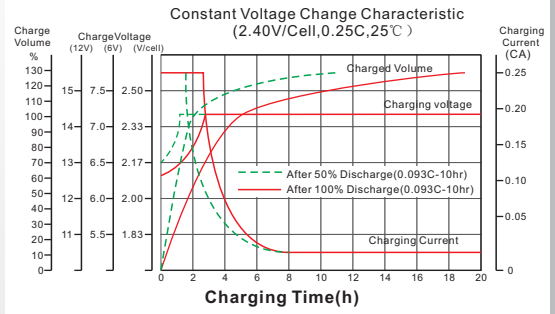
Constant Power Discharge Characteristics: W (20°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	756.0	491.4	399.3	246.3	145.6	75.87	53.66	43.89	42.94	24.29	20.68	11.56
1.65V/cell	736.3	490.9	393.6	242.3	145.2	75.42	53.55	43.79	42.61	24.10	20.47	11.14
1.70V/cell	721.6	476.1	384.6	240.8	144.9	75.23	53.45	43.79	42.50	24.07	20.26	10.92
1.75V/cell	652.1	456.5	364.5	235.0	142.5	74.05	53.13	43.47	42.39	24.00	20.04	10.50
1.80V/cell	582.5	427.1	344.4	229.4	140.1	73.04	52.71	43.16	42.29	23.90	19.73	10.18
1.85V/cell	513.0	397.6	324.4	223.9	137.7	71.95	52.29	42.84	42.18	23.90	19.41	9.863

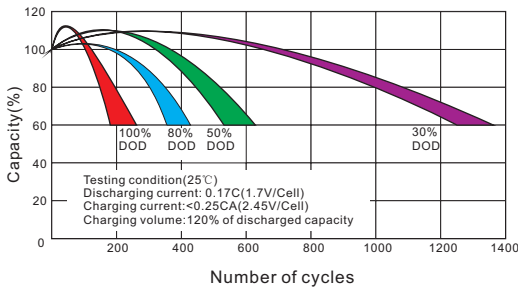
Discharge Characteristics Curve



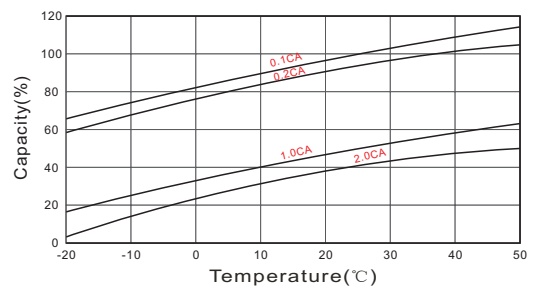
Charging Characteristics Curve



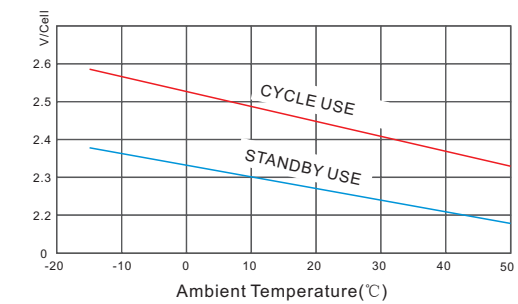
Cycle life in relation to depth of Discharge



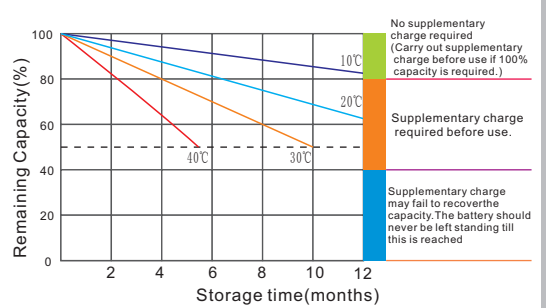
Temperature effects on Capacity



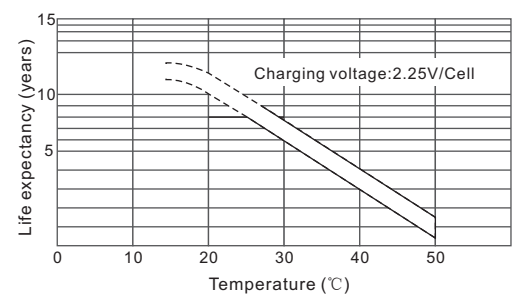
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

