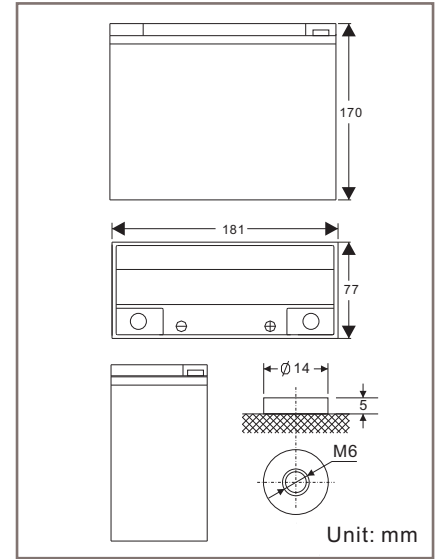


SLA BATTERY—ELECTRIC VEHICLE SERIES

Specification

Nominal Voltage	12V	
Number of cell	6	
Nominal Capacity	20Ah@ 2hr-rate (10.0 A to 1.75V/cell @25°C)	
Dimensions	Length	181±2mm (7.13 inches)
	Width	77±2mm (3.03 inches)
	Height	170±2mm (6.69 inches)
	Total Height	170±2mm (6.69 inches)
Weight	Approx. 7.0Kg	
Terminal	F24(M5,Ø10)&F11(M6,Ø14)	
Rated Capacity	24.0Ah	10hr-rate (2.4A to 1.75V/cell @20°C)
	23.5Ah	5hr-rate (4.7A to 1.75V/cell @20°C)
	21.8Ah	3hr-rate (7.26A to 1.75V/cell @25°C)
	20.0Ah	2hr-rate (10.0A to 1.75V/cell @25°C)
Minutes of discharge	>50min	20A discharge to 1.75V/cell @25°C
5A discharge characteristic	>260min to 1.75V/cell @25°C	
	>208min to 1.75V/cell @-10°C	
Max. Discharge Current	240A(5sec)	
Internal Resistance	Approx. 10mΩ(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: ≤5.0A	
	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)
- ◆

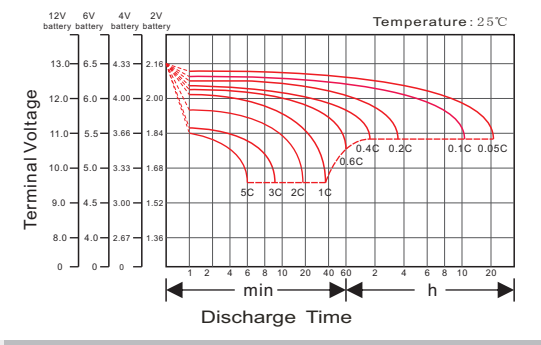
Constant Current Discharge Characteristics: A (20°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	113.8	76.03	58.46	33.78	19.99	10.42	7.373	6.048	5.013	3.325	2.879	1.616
1.65V/cell	109.7	73.07	56.59	33.26	19.87	10.34	7.344	6.019	4.984	3.312	2.849	1.557
1.70V/cell	103.7	70.81	55.29	33.00	19.73	10.32	7.315	5.990	4.954	3.299	2.820	1.528
1.75V/cell	93.70	66.27	52.41	32.26	19.44	10.19	7.286	5.962	4.924	3.286	2.791	1.469
1.80V/cell	83.68	61.75	49.50	31.48	19.15	10.02	7.229	5.933	4.895	3.272	2.732	1.410
1.85V/cell	73.75	57.21	46.63	30.70	18.89	9.867	7.171	5.904	4.865	3.259	2.703	1.381

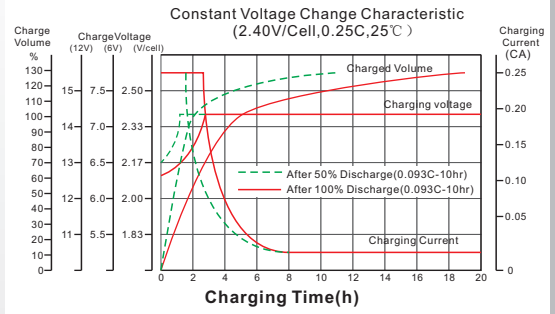
Constant Current Discharge Characteristics: W (20°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	1244	808.7	657.2	405.4	239.7	124.9	88.30	72.23	70.66	39.98	34.03	19.02
1.65V/cell	1212	807.8	647.7	398.8	239.0	124.1	88.13	72.06	70.13	39.66	33.68	18.33
1.70V/cell	1188	783.6	632.9	396.2	238.5	123.8	87.96	72.06	69.95	39.61	33.33	17.98
1.75V/cell	1073	751.3	599.9	386.7	234.5	121.9	87.44	71.54	69.77	39.50	32.99	17.28
1.80V/cell	958.6	702.8	566.8	377.6	230.5	120.2	86.75	71.02	69.59	39.34	32.46	16.75
1.85V/cell	844.2	654.4	533.8	368.4	226.5	118.4	86.05	70.50	69.41	39.34	31.94	16.23

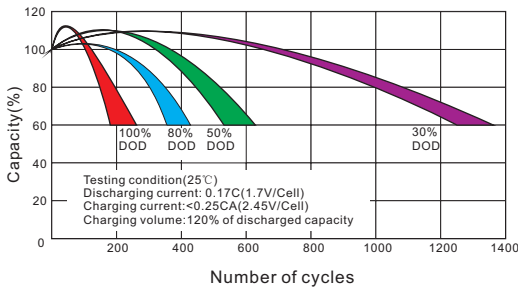
Discharge Characteristics Curve



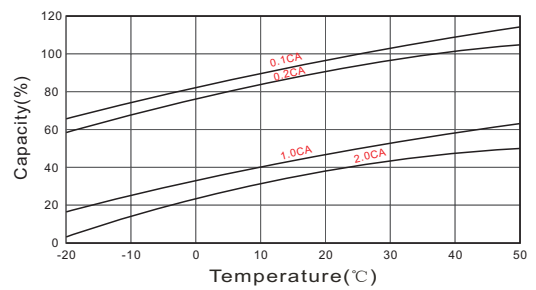
Charging Characteristics Curve



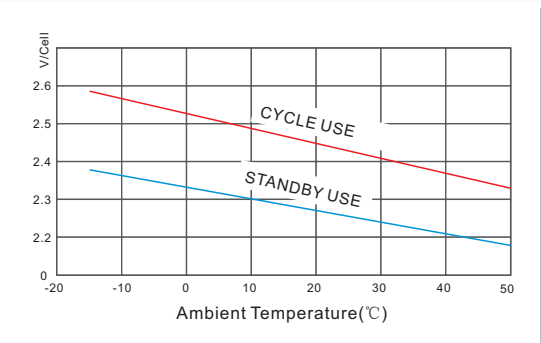
Cycle life in relation to depth of Discharge



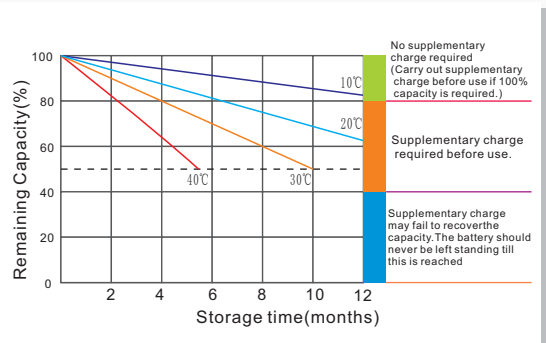
Temperature effects on Capacity



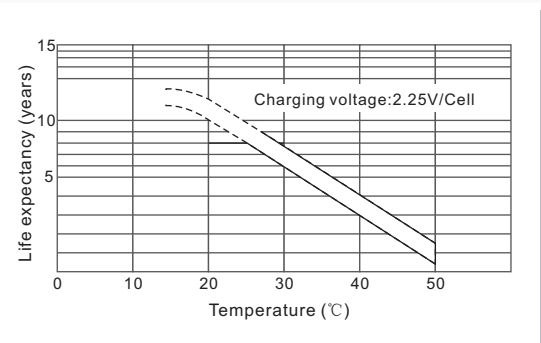
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

