

# BATTERY Samson V6-EVF-58

## Electric vehicle battery expert



### General Features

- › High Corrosion Resistant Performance: Pb-Ca multi-alloy grid
- › High Energy Density and Power Density
- › Excellent Charge Acceptance Ability
- › Strong High and Low Temperature Performance
- › Optimized Capability of instant High-current Discharging
- › Low self-discharge rate



Dimension: 223(L)×150(W)×178(H)×178(TH) Unit: mm



### Applications

- › Electric vehicle
- › Electric wheelchair
- › Electric scooter
- › Electric play car for children
- › Garbage truck
- › Patrol car

### Specification

Nominal Voltage	12V
Nominal Capacity	58Ah
Design life	5 years
Terminal	M6
Approx. Weight	Approx16.2kg (35.5lbs)
Container Material	ABS
Rated Capacity	67.4Ah 10Hour Rate (6.74A to 10.5V)
	58.0Ah 3Hour Rate (19.3A to 10.5V)
	45.8Ah 1Hour Rate (45.8A to 10.5V)
Operating Temperature	Discharge: -20 ~50°C(-4~ 122°F) Charge: -20 ~50°C(-4~ 122°F) Storage: -20 ~50°C(-4~ 122°F)
Charge Method (25 °C)	Float Use:13.7-13.9V@25°C Cycle Use :14.7-14.9V,@25°C Max charge current 11.6A
Self discharge	3% of capacity declined per month at 25°C

### Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

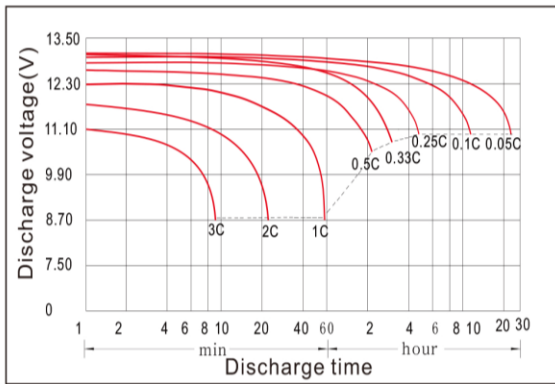
F.V/Time	5Min	15Min	30Min	1h	2h	3h	5h	8h	10h	20h
1.60V	247	132	80.6	47.2	27.1	20.0	13.1	8.44	6.94	3.64
1.65V	240	129	79.3	46.9	26.9	19.8	13.1	8.37	6.87	3.63
1.70V	230	126	77.9	46.5	26.7	19.5	12.9	8.30	6.81	3.61
1.75V	212	122	77.2	45.8	26.3	19.3	12.8	8.24	6.74	3.59
1.80V	189	113	73.9	44.7	25.8	19.2	12.5	8.18	6.67	3.57
1.85V	169	102	67.4	41.4	24.5	18.1	11.8	7.84	6.47	3.51

### Constant Power Discharge Characteristics Unit: W/cell(25°C, 77°F)

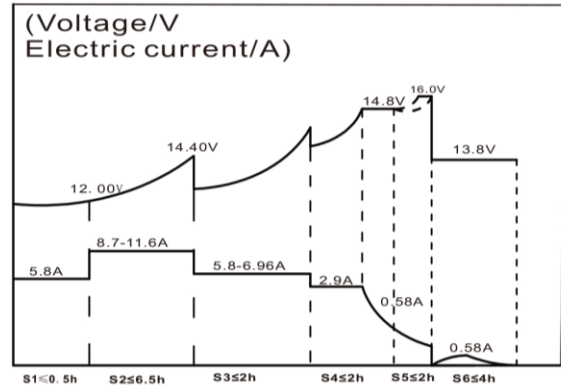
F.V/Time	5Min	15Min	30Min	1h	2h	3h	5h	8h	10h	20h
1.60V	414	234	146	89.1	51.1	38.1	24.9	16.4	13.3	7.20
1.65V	398	229	145	88.5	51.0	37.6	24.8	16.2	13.2	7.17
1.70V	396	227	145	87.8	50.8	37.4	24.7	16.2	13.1	7.13
1.75V	369	225	144	87.1	50.6	37.2	24.5	16.0	13.0	7.11
1.80V	339	213	140	86.4	50.4	37.0	24.3	16.0	12.8	7.07
1.85V	303	190	129	80.2	48.1	35.3	23.1	15.4	12.6	7.01

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

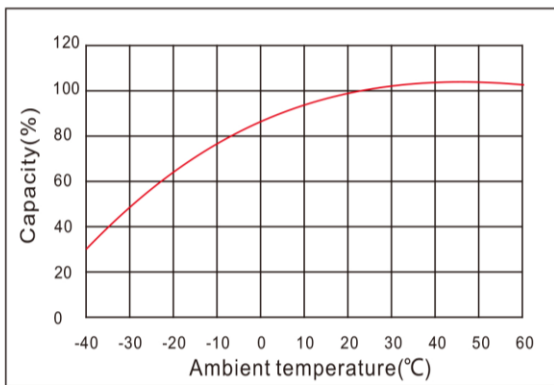
Discharge characteristic



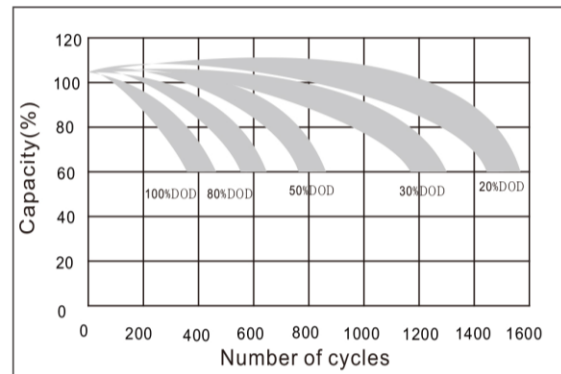
Charging characteristic



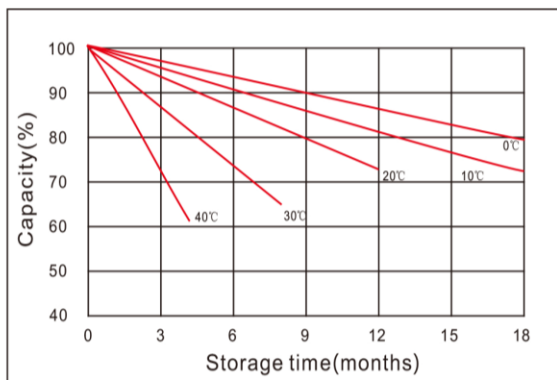
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

