

# 6-EVF-52.3

## Electric vehicle battery expert



### Applications

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

### Specification

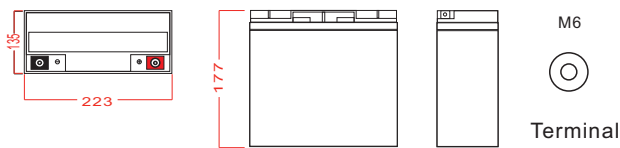
Nominal Voltage	12V
Nominal Capacity	52.3Ah
Design life	5 years
Terminal	M6
Approx. Weight	Approx14.3kg (31.6lbs)
Container Material	ABS
	<b>55.0Ah</b> 10Hour Rate (5.50A to 10.5V)
Rated Capacity	<b>52.3Ah</b> 3Hour Rate (17.4A to 10.5V)
	<b>43.5Ah</b> 1Hour Rate (43.5A to 10.5V)
Operating Temperature	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 10.4A
Self discharge	3% of capacity declined per month at 25°C

### 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)×136(W)×177(H)×177(TH) Unit: mm



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

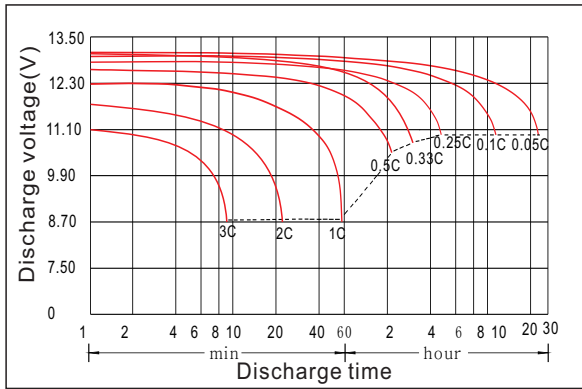
F.V/Time	5Min	15Min	30Min	1h	2h	3h	5h	8h	10h	20h
1.60V	240.4	139.7	81.5	44.7	25.2	18.0	10.98	6.89	5.66	3.25
1.65V	232.8	136.3	80.1	44.4	25.1	17.8	10.89	6.84	5.61	3.23
1.70V	223.1	133.9	78.8	44.1	24.9	17.6	10.79	6.78	5.55	3.21
1.75V	205.8	128.0	78.0	43.5	24.5	17.4	10.70	6.73	5.50	3.20
1.80V	184.1	120.9	74.6	42.3	24.1	17.2	10.42	6.67	5.45	3.18
1.85V	164.6	107.7	68.1	39.3	22.8	16.2	9.86	6.40	5.28	3.13

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

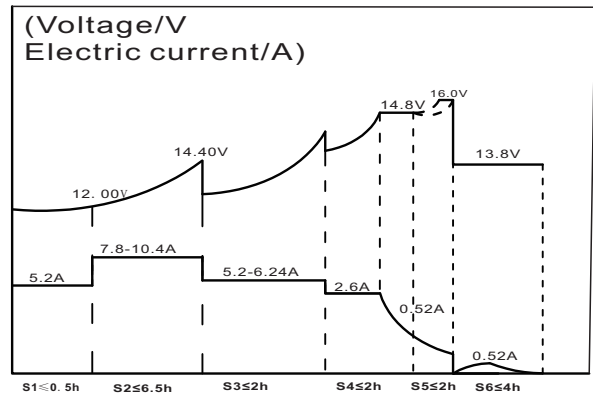
F.V/Time	5Min	15Min	30Min	1h	2h	3h	5h	8h	10h	20h
1.60V	402.8	246.6	147.4	84.6	47.6	34.2	20.84	13.36	10.91	6.43
1.65V	386.6	244.2	146.3	83.9	47.5	33.8	20.75	13.27	10.82	6.40
1.70V	385.5	241.8	146.3	83.2	47.3	33.6	20.56	13.27	10.64	6.37
1.75V	359.5	237.2	145.2	82.6	47.1	33.4	20.47	13.09	10.55	6.34
1.80V	329.2	226.4	141.8	81.9	46.9	33.3	20.28	13.00	10.45	6.31
1.85V	294.5	202.7	130.6	76.1	44.8	31.7	19.35	12.55	10.27	6.25

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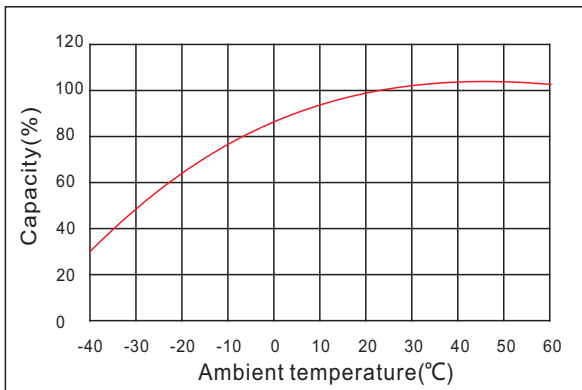
## Discharge characteristic



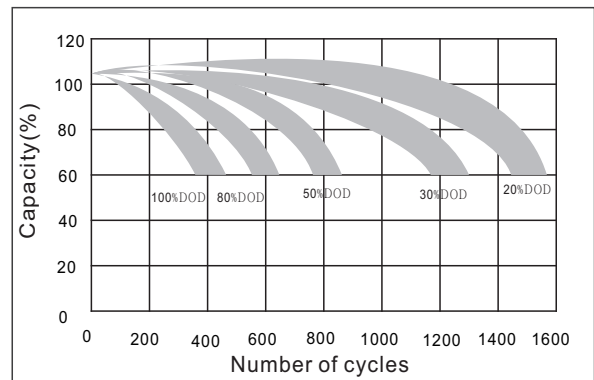
## Charging characteristic



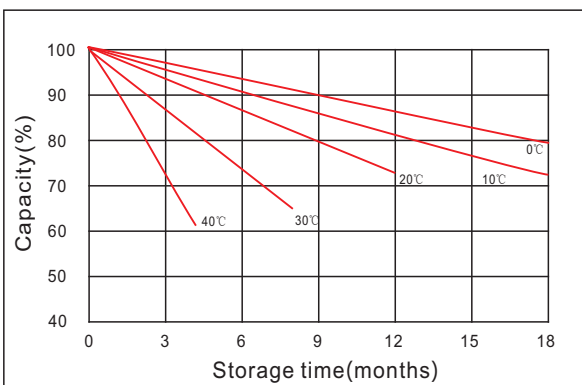
## The effect of temperature on capacity



## The effect of discharge depth on cycle life



## Curves of self-discharge



## Curves of open circuit voltage vs. capacity

