

# MOTTECH

## MT 24AH 12V

## MT Series GEL type battery



### Applications

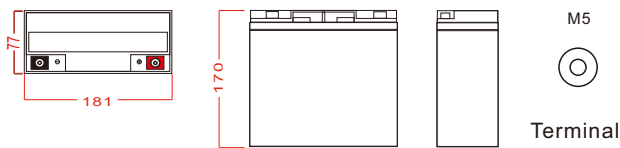
- > Electric vehicle
- > Electric wheelchair
- > Electric scooter
- > Electric play car for children
- > Garbage truck
- > Patrol car

### 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**



Dimension: 181(L)×77(W)×170(H)×170(TH) Unit: mm



### Specification

Nominal Voltage	12V
Nominal Capacity	24Ah
Design life	5 years
Terminal	M5
Approx. Weight	Approx 7.00kg
Container Material	ABS
Rated Capacity	<b>30.7Ah</b> 10Hour Rate (3.07A to 10.5V) <b>24.0Ah</b> 2Hour Rate (12.0A to 10.5V) <b>20.9Ah</b> 1Hour Rate (20.9A 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 4.8A
Self discharge	3% of capacity declined per month at 25°C

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

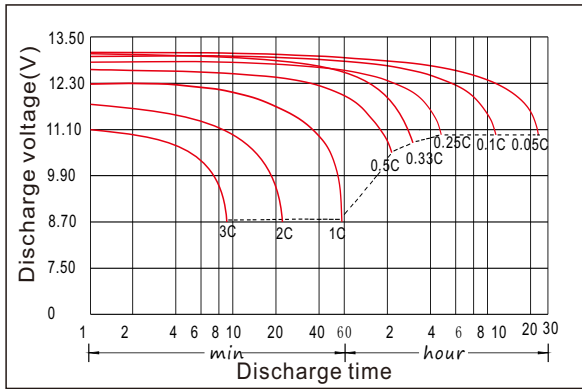
F.V/Time	5Min	15Min	30Min	1h	2h	3h	5h	8h	10h	20h
1.60V	112.5	60.4	36.8	21.5	12.4	9.13	6.00	3.85	3.17	1.66
1.65V	109.4	58.7	36.2	21.4	12.3	9.04	5.96	3.82	3.14	1.65
1.70V	105.0	57.3	35.6	21.2	12.2	8.91	5.87	3.79	3.11	1.65
1.75V	96.6	55.6	35.2	20.9	12.0	8.82	5.82	3.76	3.07	1.64
1.80V	86.5	51.6	33.7	20.4	11.8	8.78	5.69	3.73	3.04	1.63
1.85V	77.2	46.3	30.7	18.9	11.2	8.25	5.38	3.58	2.95	1.60

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

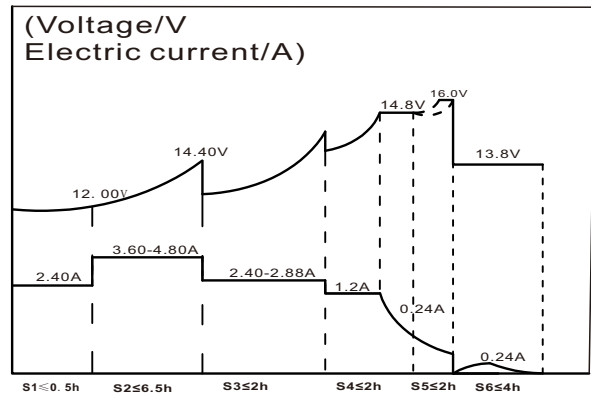
F.V/Time	5Min	15Min	30Min	1h	2h	3h	5h	8h	10h	20h
1.60V	171.2	96.8	60.4	36.9	21.2	15.8	10.3	6.80	5.52	2.98
1.65V	164.8	94.8	60.0	36.6	21.1	15.6	10.3	6.72	5.48	2.97
1.70V	164.0	94.0	60.0	36.3	21.0	15.5	10.2	6.72	5.40	2.95
1.75V	152.8	93.2	59.6	36.0	20.9	15.4	10.1	6.64	5.36	2.94
1.80V	140.4	88.0	58.0	35.8	20.8	15.3	10.0	6.60	5.28	2.92
1.85V	125.2	78.8	53.2	33.2	19.9	14.6	9.56	6.36	5.20	2.90

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.

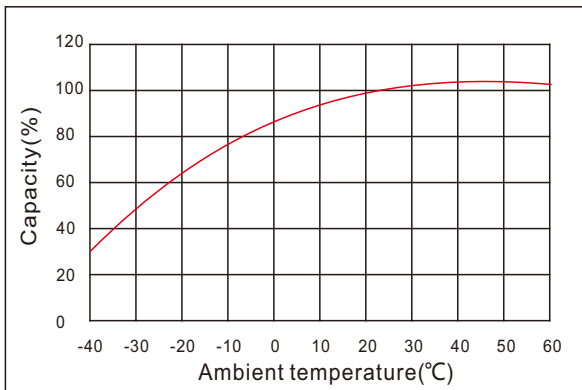
### Discharge characteristic



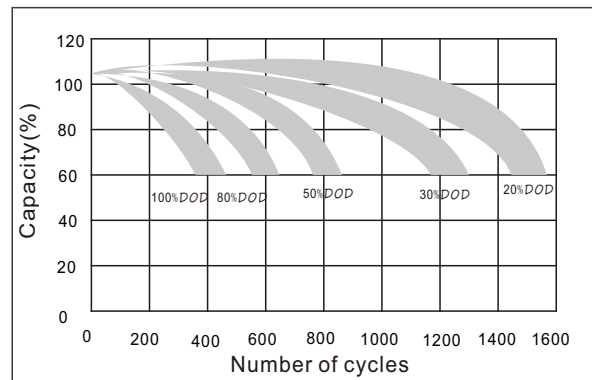
### Charging characteristic



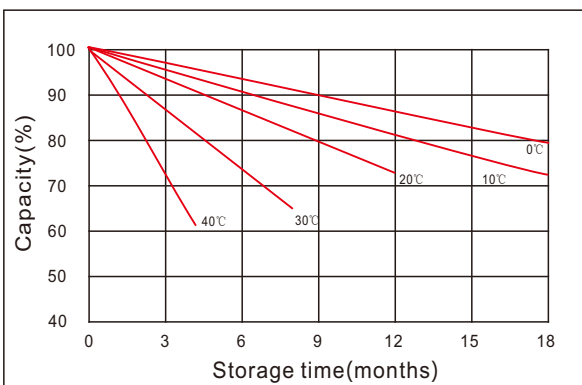
### The effect of temperature on capacity



### The effect of discharge depth on cycle life



### Curves of self-discharge



### Curves of open circuit voltage vs. capacity

