

## Features and Benefits

## General Application



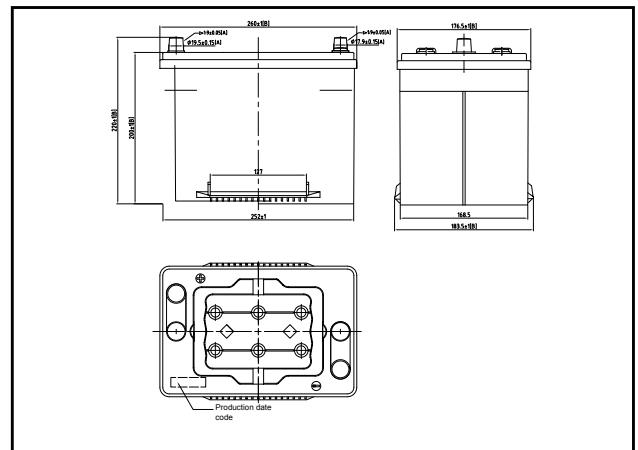
FMJ series Pure-Lead Spiral Cells have super high rate discharge, wide ambient temperature and excellent anti-vibration characteristics, with more than 350 cycles at 100% DOD(5C high rate discharge) or 15 years design life for floating application.

- ✦ Superior high and low temperature performance, workable under  $-55^{\circ}\text{C}\sim 75^{\circ}\text{C}$
- ✦ Good PSOC performance
- ✦ Excellent low current charge acceptance
- ✦ No free electrolyte, workable with any orientation
- ✦ Steady high voltage output, high energy density
- ✦ Fast chargeable, 95% state of charge can be reached in 40 minutes
- ✦ Starting type FMJ can be discharged with super high discharge rate, the max. discharge rate is  $18\text{C}_{10}$
- ✦ Very good consistency, can be connected serially and/or in parallel
- ✦ Shelf life is almost 2 years
- ✦ Long service life
  - „ The cycle life is 350 under 100%DOD at C/5 discharge rate
  - „ The design service life under floating application is 15 years
  - „ The design service life in solar application is 10 years

## Specification

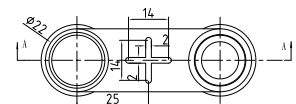
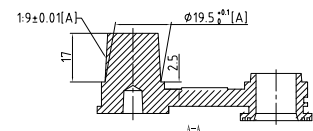
Open circuit voltage	12V
Capacity (10 Hr.)	60Ah
Weight	19.6Kg
Workable under	$-55^{\circ}\text{C}\sim 75^{\circ}\text{C}$
Resistance	$3.0\text{m}\Omega$
Specific energy (10h rate) wh/kg	33.0
Specific energy (1 ratio) wh/kg	24.6
Maxing power w/kg	530
Float Voltage ( $25^{\circ}\text{C}$ )	$13.6\sim 14.1\text{V}$
Cycle of charging voltage ( $25^{\circ}\text{C}$ )	$14.7\sim 15.0\text{V}$

## Dimensions

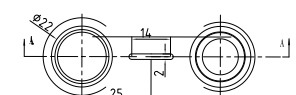
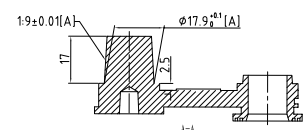


## Terminal

Positive Terminal



Negative Terminal

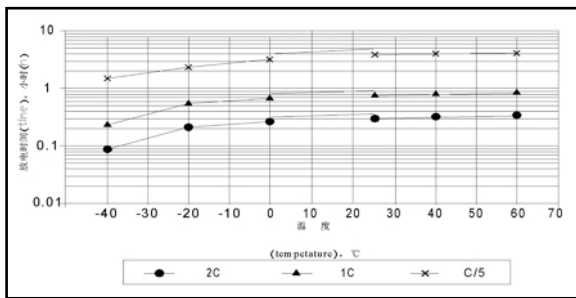


## Application Fields

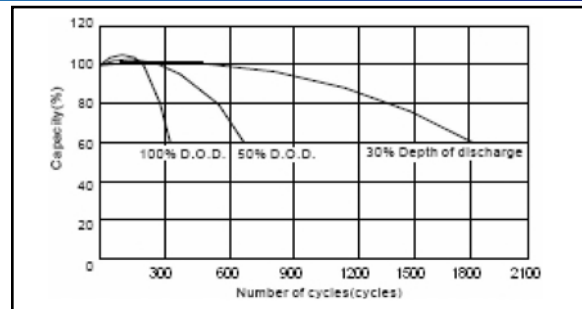
- Instruments
- Electric tools
- Physical exercise devices
- Medical devices
- Solar light
- Vehicle starting
- Standby power supply

6-FMJ-65 discharge characteristics(25°C)						
Time	discharge to 11.1V		discharge to 10.5V		discharge to 9.9V	
	constant current(A)	constant power(W)	constant current(A)	constant power(W)	constant current(A)	constant power(W)
2min	365.00	4039.20	470.40	4406.40	554.40	4716.00
5min	243.60	2743.00	291.60	3024.00	339.60	3304.80
10min	183.60	2023.00	201.60	2260.80	217.20	2520.00
15min	142.80	1612.80	152.40	1699.20	165.60	1900.80
20min	114.00	1339.20	129.60	1468.80	136.20	1526.40
30min	81.00	964.80	86.40	1022.40	93.60	1051.20
45min	62.40	691.20	64.80	741.60	66.60	748.80
1h	46.80	561.60	50.40	583.20	51.60	590.40
2h	25.20	302.40	26.40	324.00	27.00	316.80
3h	20.40	244.80	19.20	244.80	21.00	237.60
4h	16.80	187.20	15.60	180.00	15.00	201.60
5h	12.00	158.40	13.20	144.00	13.20	158.40
8h	8.40	100.80	8.40	100.80	8.40	100.80
10h	7.20	86.40	7.20	79.20	7.20	86.40
20h	3.48	43.20	3.48	36.00	3.48	36.00

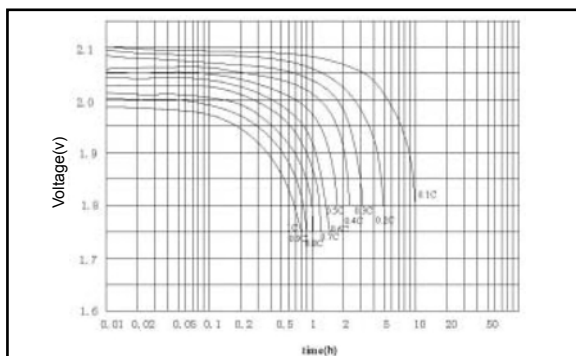
### Influences of temperature on battery Capacity



### Cycle service life in relation to DOD



### Constant current discharge performance at 25°C



### Different depth of charge-discharge characteristic curve

