



# FUJIAN YAHENG POWER TECHNOLOGY GROUP CO.,LTD

## 6FM9 12V9AH



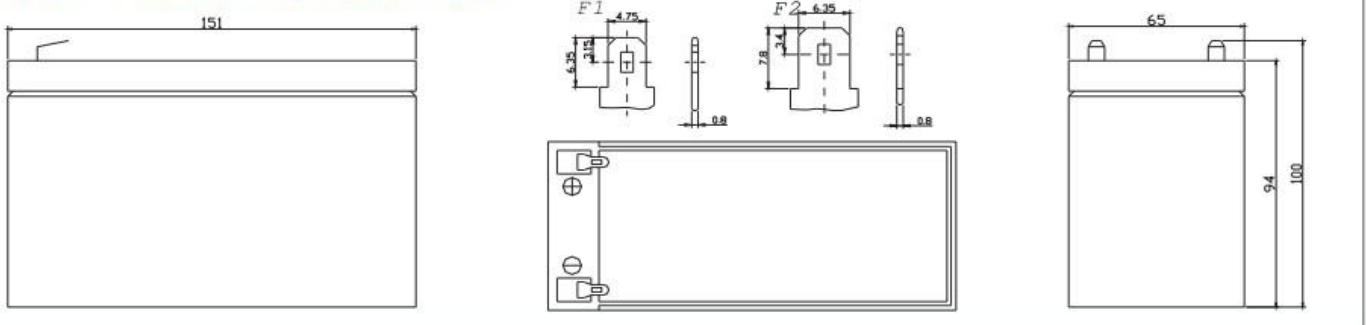
6FM9 is a general purpose battery with 5 years floating design life, meet with IEC,JIS standard. With heavy duty grid thickness plates, special additives, FM series battery have long and reliable standby service life.

### Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	9AH@20hr-rate to 1.75V per cell @ 25°C
Weight	Approx. 2.5kg (Tolerance±3%)
Max. Discharge Current	90A(5sec)
Internal Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25±5°C
Float Charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging	2.7A Current Limit
Equalization and Cycle service	14.6 to 14.8 VDC /unit Average at 25°C
Self Discharge	YAHENG Vale Regulated Lead Acid(VRLA) Can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at25°C. Please charge batteries before using
Terminal	Terminal F2
Container Material	A.B.S. UL94-HB, Flammability resistance of UL94-V2 can be avail upon request

### Dimensions

Unit: mm Dimension: 151(L)×65(W)×100(H)



### Constant Current Discharge Characteristics: A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	36.60	23.99	18.81	10.56	6.273	3.613	2.455	1.965	1.632	1.039	0.900	0.505
10.0V	35.27	23.39	18.20	10.42	6.102	3.540	2.410	1.937	1.604	1.035	0.890	0.487
10.2V	33.20	22.24	17.70	10.26	6.045	3.503	2.388	1.919	1.587	1.026	0.877	0.478
10.5V	29.84	20.79	16.69	9.980	5.926	3.457	2.367	1.900	1.567	1.017	0.872	0.463
10.8V	26.74	19.39	15.75	9.650	5.819	3.428	2.339	1.891	1.551	1.012	0.858	0.436
11.1V	23.40	17.78	14.53	9.283	5.662	3.290	2.294	1.874	1.535	1.004	0.845	0.429

### Constant Power Discharge Characteristics: W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	385.0	255.2	201.3	120.8	72.84	42.15	28.70	23.25	19.32	12.44	10.78	6.051
10.0V	375.0	249.9	198.4	119.6	71.77	41.79	28.64	23.19	19.22	12.40	10.68	5.836
10.2V	356.7	240.0	195.8	118.6	71.24	41.53	28.53	23.00	19.03	12.30	10.58	5.728
10.5V	325.5	230.1	185.6	116.1	70.28	41.19	28.42	22.79	18.80	12.20	10.47	5.567
10.8V	293.7	215.3	175.4	113.4	69.13	40.85	28.08	22.71	18.61	12.14	10.31	5.243
11.1V	259.0	200.4	165.2	110.3	67.84	39.44	27.54	22.48	18.43	12.06	10.15	5.160

All mentioned values are average values.



# FUJIAN YAHENG POWER TECHNOLOGY GROUP CO.,LTD

## Temperature and Valid Capacity



## Discharge Characteristics at Various Rates @25°C/77



## Charge characteristic curve for standby use



## Storage characteristic



## Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.75V	1.60V
Discharge Current (A)	$A \leq 0.2C$	$0.2C \leq A \leq 1.0C$	$\geq 1.0C$

Charge the batteries at least once every six months, if they are stored at 25°C

Charging Method:

Constant Voltage	$-0.2C \times 2h + 2.4 - 2.45V/cell \times 24h$ , Max. Current 0.3CA
Constant Current	$-0.2C \times 2h + 0.1CA \times 12h$
Fast	$-0.2C \times 2h + 0.3CA \times 4.0h$

## Maintenance & Cautions

### Float Service

- ✘ Every month, recommend inspection every battery voltage
  - ✘ Every three months, recommend equalization charge for one time.
- Equalization charge method:
- Discharge: 100% rate capacity discharge.
- Charge: Max. Current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h
- ✘ Effect of temperature on float charge voltage: -3mV/Cell.
  - ✘ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.

## Contact us:

Fujian Yaheng Power Technology Group Co.,Ltd

Add: Yaheng Industrial Park, Jianyang District, Nanping City, Fujian Province, China

Website: [www.yahengpower.com](http://www.yahengpower.com)

Email: [liwendu@yahengpower.com](mailto:liwendu@yahengpower.com)

Tel: +86-599-5837578 Fax: +86-599-5823986