



# FUJIAN YAHENG POWER TECHNOLOGY GROUP CO.,LTD

## 6FM55H 12V55AH

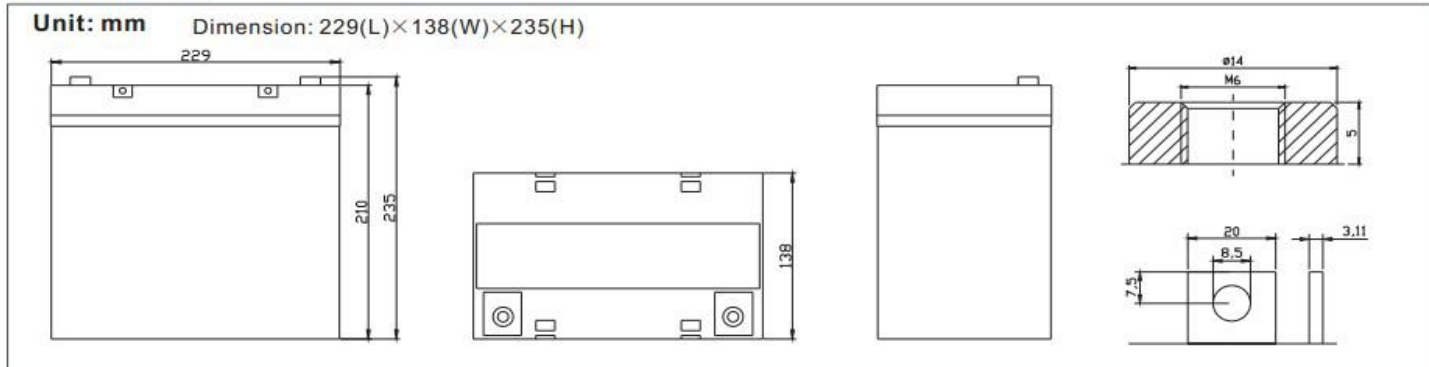


6FM55H is a high rate discharge battery. It is specially designed for applications where need high power output. By optimum design of battery grids and plate formula, the battery can deliver up to 40% more power than the standard range. Suitable for UPS/EPS where high current loads is required.

### Specification

|                                    |   |
|------------------------------------|---|
| Cells Per Unit                     | 6   |
| Voltage Per Unit                   | 12V   |
| Capacity                           | 240W@10min-rate to 1.6V per cell @ 25°C   |
| Weight                             | Approx. 17.5kg (Tolerance±3%)   |
| Max. Discharge Current             | 550A(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       | 16.5A 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 at 25°C. Please charge batteries before using |
| Terminal                           | Terminal F14/L20  |
| Container Material                 | A.B.S. UL94-HB, Flammability resistance of UL94-V2 can be avail upon request  |

### Dimensions



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

| F.V/Time | 5MIN  | 10MIN | 15MIN  | 30MIN | 1HR   | 2HR   | 3HR   | 4HR   | 5HR   | 8HR   | 10HR  | 20HR  |
|----------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 9.60V    | 184.3 | 135.7 | 105.8  | 64.46 | 35.75 | 21.38 | 14.76 | 12.23 | 10.30 | 7.033 | 5.833 | 3.113 |
| 10.0V    | 179.0 | 129.1 | 103.6  | 63.34 | 35.59 | 21.22 | 14.71 | 12.17 | 10.24 | 6.976 | 5.777 | 3.056 |
| 10.2V    | 173.7 | 124.5 | 101.97 | 62.17 | 35.26 | 21.06 | 14.59 | 12.12 | 10.17 | 6.919 | 5.721 | 2.999 |
| 10.5V    | 155.9 | 114.9 | 97.09  | 61.70 | 34.93 | 20.90 | 14.54 | 12.00 | 10.05 | 6.861 | 5.665 | 2.943 |
| 10.8V    | 140.7 | 104.8 | 89.50  | 60.65 | 34.10 | 20.52 | 14.14 | 11.72 | 9.872 | 6.747 | 5.609 | 2.886 |
| 11.1V    | 120.2 | 93.7  | 80.28  | 56.78 | 32.40 | 19.61 | 13.52 | 11.15 | 9.448 | 6.461 | 5.441 | 2.716 |

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

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR   | 2HR   | 3HR   | 4HR   | 5HR   | 8HR   | 10HR  | 20HR  |
|----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 9.60V    | 1944 | 1445  | 1153  | 723.3 | 413.1 | 252.0 | 175.7 | 145.8 | 122.8 | 83.97 | 69.71 | 37.32 |
| 10.0V    | 1906 | 1401  | 1135  | 714.4 | 412.1 | 250.7 | 175.7 | 145.6 | 122.5 | 83.57 | 69.27 | 36.67 |
| 10.2V    | 1884 | 1364  | 1122  | 709.4 | 408.9 | 249.1 | 175.0 | 145.3 | 122.1 | 83.02 | 68.65 | 35.99 |
| 10.5V    | 1715 | 1270  | 1070  | 704.5 | 405.3 | 247.3 | 174.3 | 143.9 | 120.6 | 82.34 | 67.98 | 35.31 |
| 10.8V    | 1562 | 1171  | 989.0 | 693.2 | 397.8 | 244.2 | 169.6 | 140.6 | 118.5 | 80.96 | 67.31 | 34.63 |
| 11.1V    | 1372 | 1058  | 890.3 | 652.9 | 380.8 | 235.1 | 162.2 | 133.8 | 113.3 | 77.53 | 65.29 | 32.60 |

All mentioned values are average values.



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## 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 ≤ 0.2C | 0.2C ≤ A ≤ 1.0C | ≥ 1.0C |

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

Charging Method:

|                  |  |
|------------------|--|
| Constant Voltage | -0.2C*2h+2.4-2.45V/cell*24h, Max.Current 0.3CA |
| Constant Current | -0.2C*2h+0.1CA*12h                             |
| Fast             | -0.2C*2h+0.3CA*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:

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