

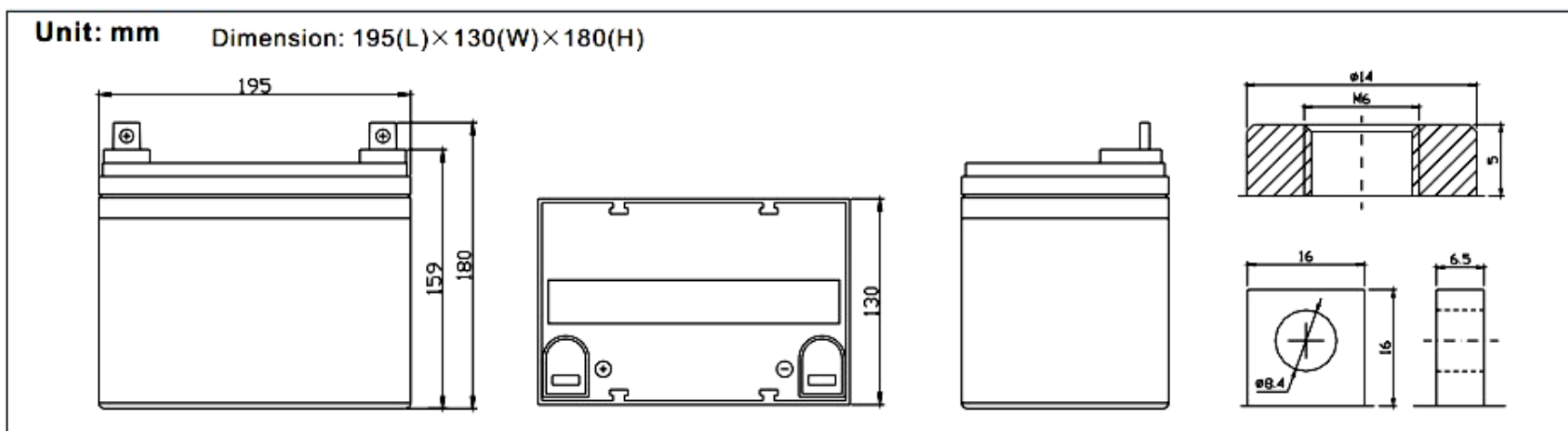
**6-DZM-33 is AGM deep cycle battery, with specially designed for frequent cyclic discharge usage. By using strong grid and specific paste plate, it can deliver more than 450 cycles at 100% DOD. It is applicable for electric bicycle, golf cart, electric wheelchair, etc..**



### Specification

|                                    |   |
|------------------------------------|---|
| Cells Per Unit                     | 6   |
| Voltage Per Unit                   | 12V   |
| Capacity                           | 33AH@2hr-rate to 1.75V per cell @ 25°C  |
| Weight                             | Approx. 11.5kg (Tolerance ± 3%)   |
| Max. Discharge Current             | 330A(5sec)  |
| Internal Temperature Range         | Discharge: -20°C~60°C<br>Charge: 0°C~50°C<br>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       | 9.9A  |
| 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/L16  |
| 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    | 150.8 | 111.0 | 86.54 | 52.74 | 29.25 | 17.49 | 12.08 | 10.01 | 8.424 | 5.745 | 4.773 | 2.547 |
| 10.0V    | 146.4 | 105.6 | 84.76 | 51.83 | 29.12 | 17.36 | 12.03 | 9.960 | 8.374 | 5.707 | 4.727 | 2.500 |
| 10.2V    | 142.1 | 101.9 | 83.43 | 50.87 | 28.85 | 17.23 | 11.94 | 9.913 | 8.325 | 5.661 | 4.681 | 2.454 |
| 10.5V    | 127.6 | 94.03 | 79.44 | 50.48 | 28.58 | 17.10 | 11.89 | 9.821 | 8.226 | 5.614 | 4.635 | 2.408 |
| 10.8V    | 115.2 | 85.74 | 73.23 | 49.62 | 27.90 | 16.79 | 11.57 | 9.589 | 8.077 | 5.520 | 4.589 | 2.361 |

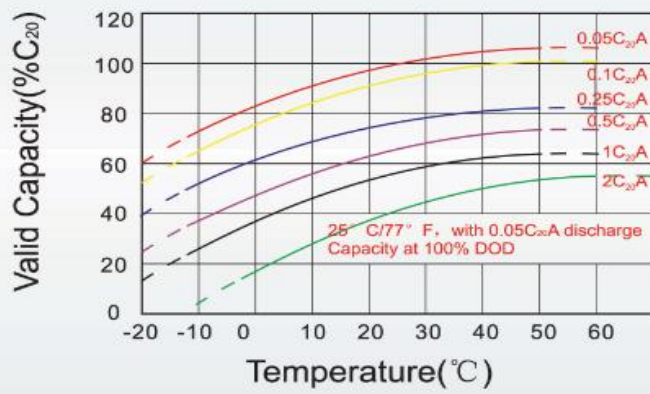
### Constant Power Discharge Characteristics: W(25°C)

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR   | 2HR   | 3HR   | 4HR   | 5HR   | 8HR   | 10HR  | 20HR  |
|----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 9.60V    | 1591 | 1182  | 943.4 | 591.8 | 338.0 | 206.2 | 143.7 | 119.3 | 100.5 | 68.71 | 57.03 | 30.53 |
| 10.0V    | 1559 | 1146  | 928.3 | 584.5 | 337.2 | 205.1 | 143.8 | 119.1 | 100.2 | 68.37 | 56.67 | 30.00 |
| 10.2V    | 1542 | 1116  | 917.8 | 580.4 | 334.6 | 203.8 | 143.2 | 118.9 | 99.90 | 67.93 | 56.17 | 29.45 |
| 10.5V    | 1403 | 1039  | 875.5 | 576.4 | 331.6 | 202.4 | 142.6 | 117.7 | 98.71 | 67.37 | 55.62 | 28.89 |
| 10.8V    | 1278 | 957.8 | 809.2 | 567.1 | 325.5 | 199.8 | 138.7 | 115.1 | 96.93 | 66.24 | 55.07 | 28.34 |

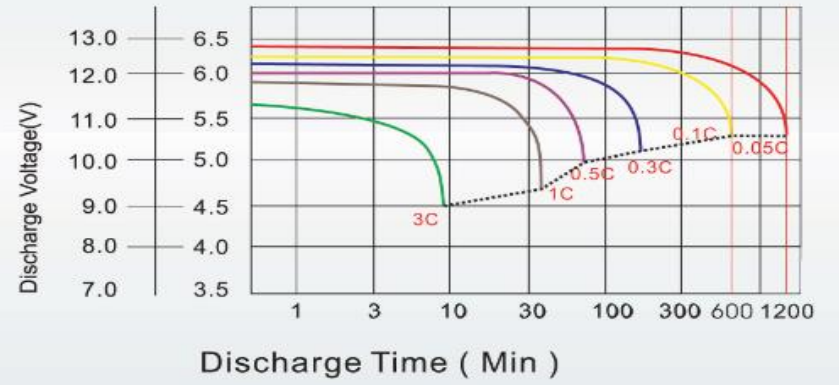
All mentioned values are average values.



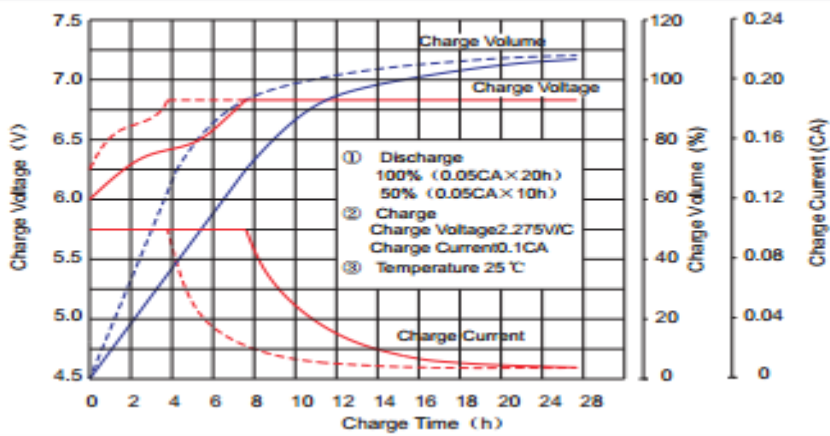
Temperature and Valid Capacity



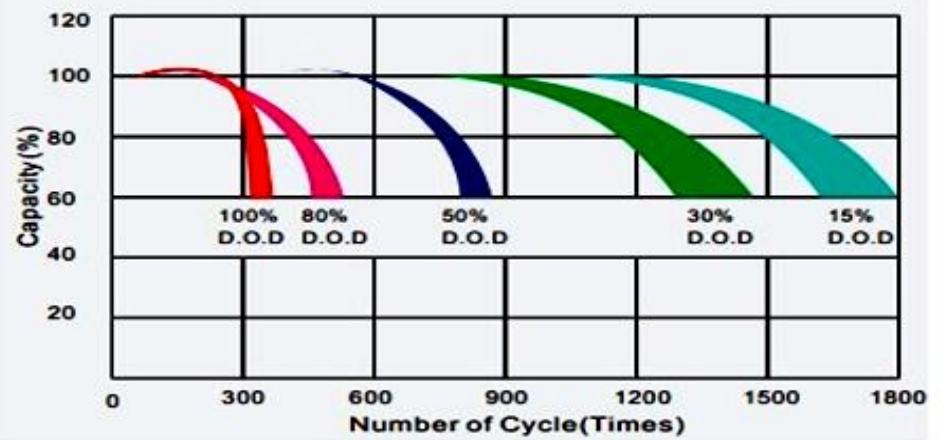
Discharge Characteristics at Various Rates @25°C/77°F



Charge characteristic curve for standby use



Life characteristics of cyclic use



**Discharge Current VS. Discharge Voltage**

|                                |          |                 |        |
|--------------------------------|----------|-----------------|--------|
| Final Discharge Voltage V/cell | 1.75V    | 1.70V           | 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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