

# VRLA Battery Specification

## ---12V Series



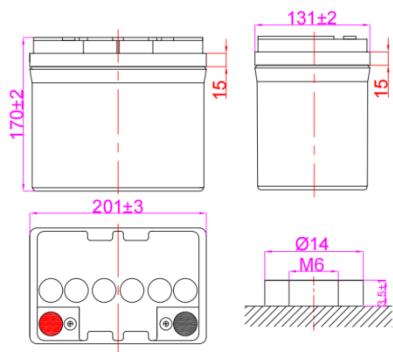
### 6-GFM-33 (12V33Ah)



#### Specifications

|                                              |                                      |      |
|----------------------------------------------|--------------------------------------|------|
| Nominal Voltage                              | 12 V                                 |      |
| Nominal Capacity(C10)                        | 33Ah(1.80V/cell@25°C)                |      |
| Dimensions                                   | 201*131*170*170mm                    |      |
| Approx .Weight                               | 9.5kg ±3%                            |      |
| Internal Resistance                          | Approx.11mΩ@25°C                     |      |
| Terminal                                     | Φ14*M6                               |      |
| Operating Temperature Range                  | Discharge: -20°C ~ 55°C (-4 ~ 104°F) |      |
|                                              | Charge: 0°C~ 40°C (-4 ~ 104°F)       |      |
|                                              | Storage : -20°C ~ 55°C (-4 ~ 122°F)  |      |
| Nominal Operating Temperature Range          | 25±3°C (77±5°F )                     |      |
| Max. Charging Current                        | 9.9A @25°C                           |      |
| Charging voltage(25°C)                       | Float : 2 .25V ~ 2 .30V/cell         |      |
|                                              | Temp.Coefficient : -3mV/°C           |      |
|                                              | Equalization : 2 .40V ~ 2 .45V/cell  |      |
|                                              | Temp.Coefficient : -4mV/°C           |      |
|                                              | Cycle : 2 .40V~2 .45V/cell           |      |
|                                              | Temp.Coefficient : -5mV/°C           |      |
| Effect of temperature to rated Capacity(C10) | 40°C ( 104°F )                       | 105% |
|                                              | 25°C (77°F )                         | 100% |
|                                              | 0°C (32°F )                          | 86%  |
| Self Discharge                               | ≤3%/month@ 25°C                      |      |
| Casing material                              | ABS( UL94 HB or V-0 optional)        |      |

#### Layout



#### Constant Current Discharge\*(Amperes @25°C/77° F)

| Time   | 5min | 10min | 15min | 30min | 1h   | 2h    | 3h   | 4h   | 5h   | 8h   | 10h   | 20h   |
|--------|------|-------|-------|-------|------|-------|------|------|------|------|-------|-------|
| 9.60V  | 122  | 73.9  | 59.8  | 34.8  | 18.3 | 11.03 | 8.76 | 7.44 | 6.20 | 4.09 | 3.452 | 1.859 |
| 10.20V | 109  | 65.6  | 50.4  | 25.9  | 16.5 | 10.67 | 8.54 | 7.29 | 6.04 | 4.01 | 3.388 | 1.821 |
| 10.50V | 114  | 62.5  | 47.2  | 25.2  | 15.7 | 10.48 | 8.47 | 7.24 | 6.00 | 3.98 | 3.368 | 1.811 |
| 10.80V | 100  | 59.4  | 45.0  | 26.2  | 14.8 | 10.17 | 8.20 | 7.02 | 5.82 | 3.86 | 3.300 | 1.774 |
| 11.10V | 89   | 53.0  | 42.5  | 25.0  | 13.9 | 9.66  | 7.75 | 6.66 | 5.51 | 3.66 | 3.165 | 1.702 |

#### Constant Power Discharge\*(Watts/Unit @25°C/77° F)

| Time   | 5min | 10min | 15min | 30min | 1h   | 2h   | 3h   | 4h    | 5h    | 8h   | 10h  | 20h  |
|--------|------|-------|-------|-------|------|------|------|-------|-------|------|------|------|
| 9.60V  | 225  | 136   | 112   | 65.5  | 34.7 | 21.4 | 16.5 | 14.28 | 11.84 | 7.71 | 6.85 | 3.52 |
| 10.20V | 199  | 123   | 94    | 56.9  | 30.6 | 20.7 | 15.0 | 13.98 | 11.54 | 7.52 | 6.73 | 3.44 |
| 10.50V | 195  | 117   | 88    | 55.6  | 29.0 | 20.3 | 14.9 | 13.88 | 11.45 | 7.47 | 6.69 | 3.42 |
| 10.80V | 188  | 111   | 86    | 51.6  | 27.2 | 19.7 | 14.4 | 13.44 | 11.08 | 7.23 | 6.55 | 3.35 |
| 11.10V | 168  | 99    | 79    | 49.4  | 25.6 | 18.7 | 13.5 | 12.73 | 10.47 | 6.83 | 6.28 | 3.20 |



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### 6-GFM-33 (12V33Ah)

#### General Features

- 10 years design life
- Very low Self-discharge rate
- Wide range of operating temperature
- 100% Sealed and maintenance free
- Good conductivity
- Excellent charge acceptance
- Safe and reliable explosion-proof regulating valve

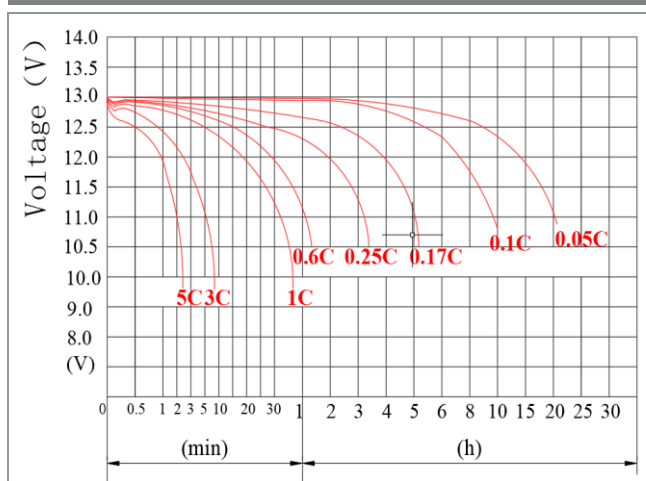
#### Applications

- Telecommunications
- UPS、Data Center
- Energy Storage, Electric Systems
- Emergency Lighting, Security
- Medical, Electronic Equipment
- Motive Power

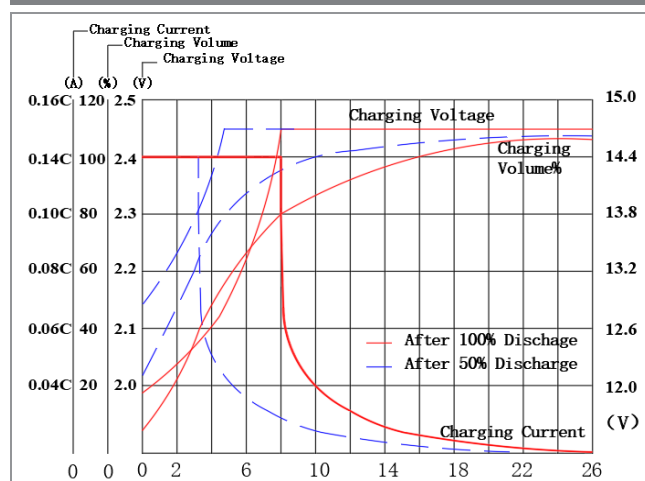
#### Standards

- Compliant with IEC60896, IEC61427, GB/T19638, YD/T1360-2015, YD/T799, DL/T637
- Certified for TLC, CE, RoHS and Reach compliance
- The company Aokly is certified under TS16949, OHSAS18001, SA8000, ISO9001, ISO14001, ISO45001 and ISO50001 management systems

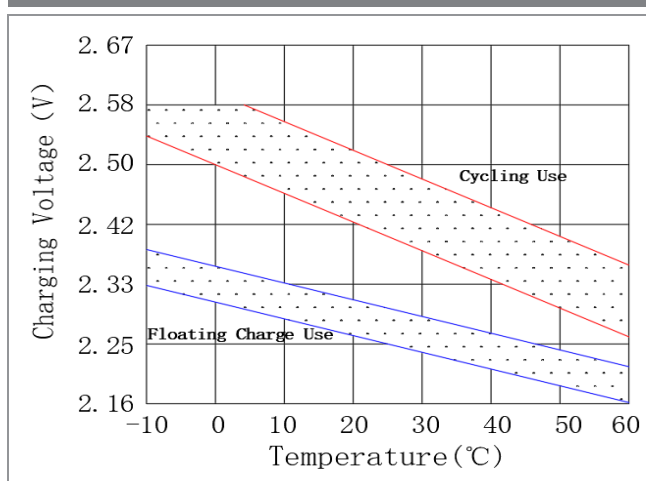
#### Discharge Characteristics(25°C)



#### Charging Characteristics(25°C)



#### Rel.The between Temp. and Charging Volt.



#### Capacity Retention Characteristics

