# VRLA TUBULAR GEL Battery

# OPzV150-12

## SPECIFICATIONS

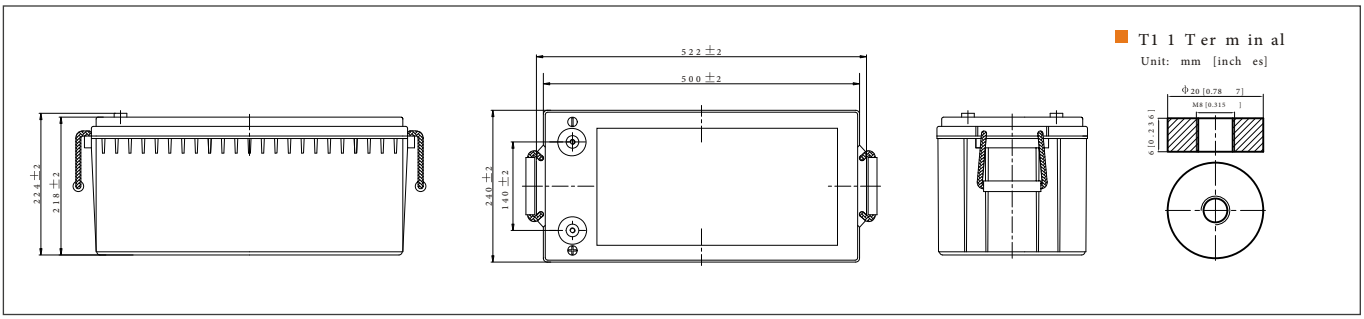
| | |
|---|---|
| Nominal Voltage (V) | 12 |
| Designed Floating Life | 20+ Years |
| Nominal Capacity | 150AH@ 10HR to 10.8V |
| Demensions | L522mm x W240mm x H224mm |
| Approx. Weight | 54kg(118.8lbs) |
| Terminal Type | Female Copper Insert M8 (torque:10~12N.m) |
| Internal Resistance | Approx. 7mOhm (fully charged @ 20°C) |
| Max. Charge Current | 30 A |
| Max. Discharge Current (5S) | 1000 A |
| Short Circuit Current | 1700 A |
| Self Discharge | Approx. 2% per month @ 20°C |
| Ambient Temperature | Discharge: -40~65°C<br>Charge: -30~65°C<br>Storage: -25~45°C |
| Float Charge Voltage (20~25C) | 2.25-2.29V (-3mV /°C/ cell) |
| Equalize Charge Voltage (20~25°C) | 2.35-2.40V (-5mV /°C/ cell) |
| Container Material | ABS(UL94-V0 optional) |


ISO9001 ISO14001

### Complied standards

- IEC 60896-21/22
- DIN40742
- IEC61427
- YD/T1360
- Eurobat guide, long life
- BS6290 part 4
- UL1989

## DIMENSIONS




## Battery Construction

| Component | Positive plate | Negative plate | Container | Safety valve | Terminal | Separator | Electrolyte |
|---|---|---|---|---|---|---|---|
| Raw material | Tubular Plate | Pure Lead | ABS(UL94-HB) | Rubber | Copper | PE-SiO2 | Gel |

### Constant Current Discharge (Amperes) at 25°C(77°F)

| E.V/Time | 10min | 15min | 30min | 1h | 3h | 5h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|
| 1.60V | 347 | 282 | 163 | 97.0 | 40.1 | 28.1 | 15.5 | 7.93 |
| 1.65V | 327 | 267 | 158 | 95.0 | 39.4 | 27.6 | 15.4 | 7.90 |
| 1.70V | 306 | 253 | 153 | 93.0 | 38.5 | 27.1 | 15.3 | 7.90 |
| 1.75V | 286 | 239 | 147 | 91.0 | 38.0 | 26.6 | 15.2 | 7.85 |
| 1.80V | 263 | 226 | 144 | 89.0 | 37.4 | 26.0 | 15.0 | 7.80 |

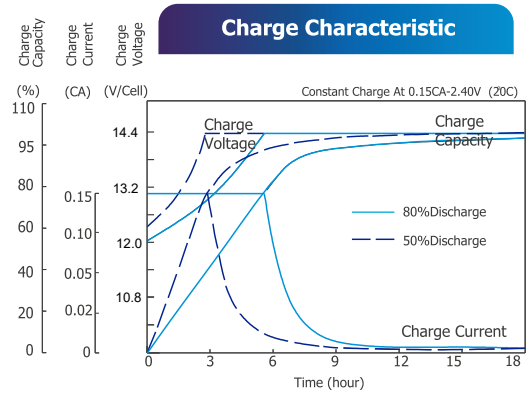
### Constant Power Discharge (Watts/cell) at 25°C(77°F)

| E.V/Time | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 5h |
|---|---|---|---|---|---|---|---|---|
| 1.60V | 609 | 501 | 325 | 221 | 201 | 112 | 78.0 | 53.5 |
| 1.65V | 579 | 483 | 315 | 216 | 198 | 110 | 77.1 | 53.2 |
| 1.70V | 548 | 465 | 306 | 211 | 195 | 108 | 76.2 | 52.8 |
| 1.75V | 519 | 446 | 296 | 206 | 190 | 106 | 75.3 | 52.5 |
| 1.80V | 487 | 425 | 286 | 202 | 184 | 105 | 74.0 | 52.0 |

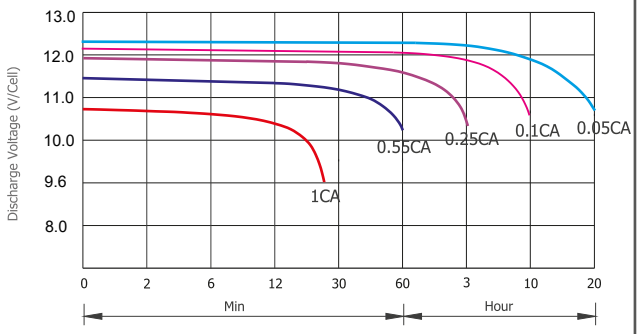
Note: The above characteristics data are average values obtained Within three charge/discharge cycles not the minimum.

## CHARACTERISTICS

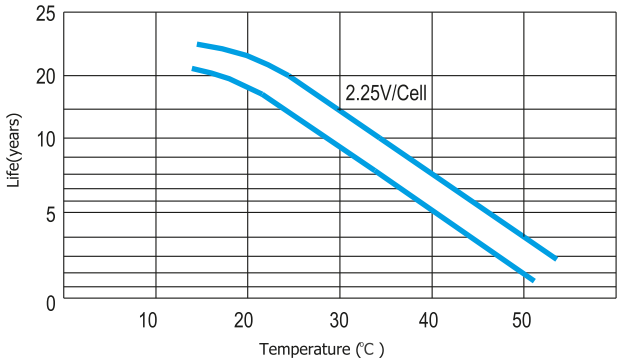
### Charge Characteristic



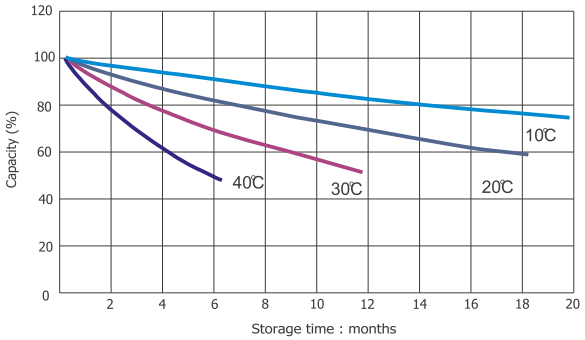

### Discharge Characteristic (20℃)



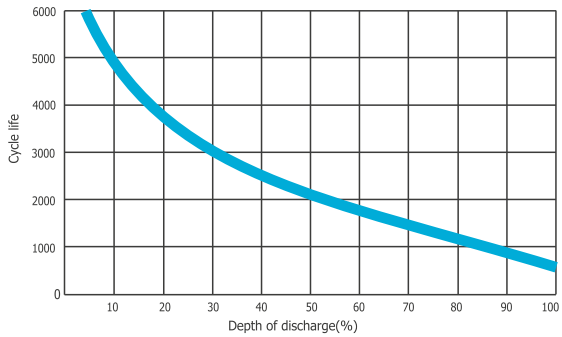

### Temperature vs Float Life



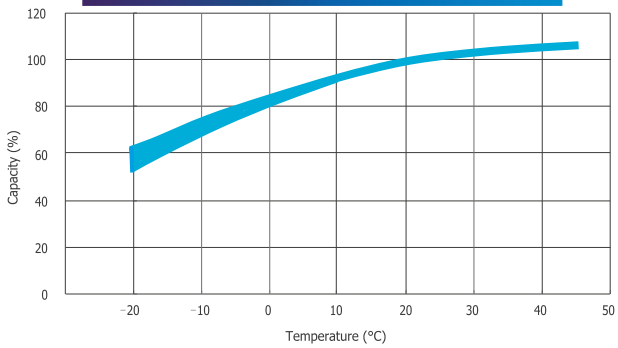

### Self Discharge Characteristics



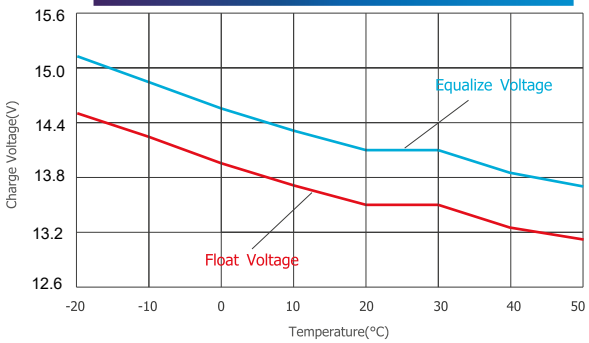

### Cycle Life vs Depth of Discharge



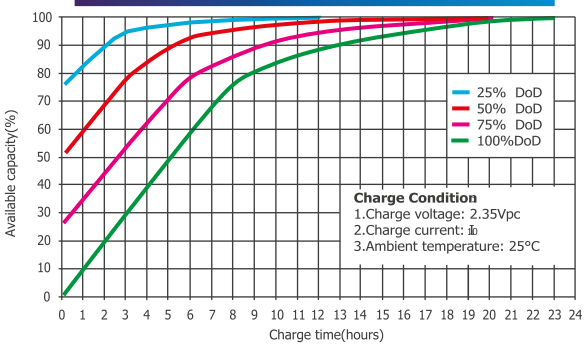

### Capacity vs Temperature




### Charge Voltage Capacity vs Temperature




### Charge Capacity vs Time





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