

OPzV series is Valve Regulated Lead Acid battery that adopts immobilized GEL and Tubular Plate technology to offer high reliability and performance. The Battery is designed and manufactured according to DIN standards and with die-casting positive grid and patented formula of active material OPzV series exceeds DIN standard values with more than 20 years floating design life at 25 °C ,and It is the best solution for cyclic use under extreme operating conditions.

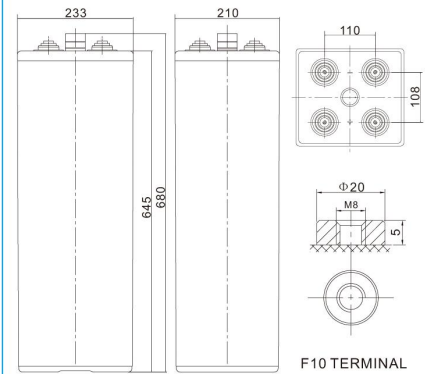
Specification

| | |
|---|--|
| Cells Per Unit | 1 |
| Voltage Per Unit | 2 |
| Nominal Capacity | 1000Ah@10hr-rate to 1.80V per cell @25°C |
| Weight | Approx. 77.0 Kg (Tolerance±1.5%) |
| Internal Resistance | Approx. 0.45 mΩ |
| Terminal | F10(M8) |
| Max. Discharge Current | 3800A (5 sec) |
| Design Life | 20 years (floating charge) |
| Maximum Charging Current | 200.0 A |
| Reference Capacity | C24 1113AH C48 1250AH C72 1258AH C100 1275AH C120 1296AH C240 1318AH |
| Float Charging Voltage | 2.25 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell |
| Cycle Use Voltage | 2.37 V~2.40 V @ 25°C Temperature Compensation: -4mV/°C/Cell |
| Operating Temperature Range | Discharge: -40°C~60°C Charge: -20°C~50°C Storage: -40°C~60°C |
| Normal Operating Temperature Range | 25°C ± 5°C |
| Self Discharge | GERCH Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 2% at 25°C. Please charged batteries before using. |
| Container Material | A.B.S. UL94-HB, UL94-V0 Optional. |



Dimensions

Unit: mm



| | |
|--------------|-----------------------|
| Length | 233±1mm (9.17 inches) |
| Width | 210±1mm (8.27 inches) |
| Height | 645±1mm (25.4 inches) |
| Total Height | 680±1mm (26.8 inches) |
| Torque Value | 10~12 N*m |

Constant Current Discharge Characteristics : A(25°C)

| F.V/ Time | 30m in | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|-----------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.90V | 492.0 | 390.0 | 275.0 | 208.6 | 171.0 | 147.8 | 133.0 | 103.8 | 89.00 | 46.73 |
| 1.87V | 550.0 | 430.0 | 295.0 | 221.2 | 180.5 | 155.4 | 141.0 | 108.6 | 93.00 | 48.83 |
| 1.83V | 630.0 | 480.0 | 320.0 | 235.7 | 190.0 | 162.2 | 146.0 | 113.5 | 97.00 | 50.93 |
| 1.80V | 700.0 | 520.0 | 332.0 | 242.5 | 193.8 | 166.0 | 150.0 | 116.4 | 100.0 | 52.50 |
| 1.75V | 780.0 | 557.0 | 347.0 | 252.2 | 197.0 | 170.0 | 153.0 | 118.3 | 102.0 | 53.55 |
| 1.70V | 860.0 | 575.0 | 357.0 | 257.1 | 200.5 | 172.0 | 155.0 | 119.3 | 103.0 | 54.08 |
| 1.65V | 887.0 | 611.0 | 369.0 | 264.0 | 203.3 | 174.0 | 157.0 | 120.3 | 104.0 | 54.60 |
| 1.60V | 925.0 | 632.0 | 383.0 | 275.0 | 209.0 | 177.0 | 159.0 | 121.3 | 105.0 | 55.13 |

Constant Power Discharge Characteristics : WPC(25°C)

| F.V/ Time | 30m in | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|-----------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.90V | 941.7 | 748.7 | 531.6 | 404.0 | 334.7 | 291.0 | 263.0 | 207.6 | 181.4 | 95.23 |
| 1.87V | 1036 | 813.0 | 563.8 | 423.1 | 352.8 | 305.0 | 278.0 | 216.3 | 189.2 | 99.30 |
| 1.83V | 1161 | 886.4 | 600.0 | 445.2 | 369.8 | 317.0 | 287.0 | 224.1 | 195.9 | 102.9 |
| 1.80V | 1268 | 945.7 | 620.1 | 455.3 | 376.9 | 324.0 | 294.0 | 228.9 | 200.8 | 105.4 |
| 1.75V | 1376 | 987.9 | 640.2 | 469.3 | 381.9 | 332.0 | 299.0 | 231.8 | 203.7 | 106.9 |
| 1.70V | 1475 | 998.0 | 656.3 | 477.4 | 387.9 | 335.0 | 302.0 | 233.8 | 205.6 | 108.0 |
| 1.65V | 1500 | 1042 | 674.4 | 487.4 | 393.0 | 338.0 | 305.0 | 235.7 | 206.6 | 108.5 |
| 1.60V | 1519 | 1074 | 690.4 | 503.5 | 403.0 | 341.0 | 307.0 | 236.7 | 207.6 | 109.0 |

(Note)The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

