

MVG 12500

Valve-regulated lead-acid battery



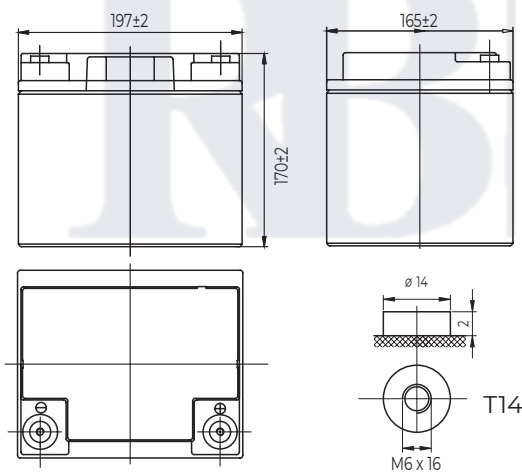
Deep Cycle Gel



SPECIFICATIONS

| | | |
|--|------------------------|-------------------------|
| Nominal voltage | 12V (6 cell per unit) | |
| Nominal capacity at 10 hours rate/10.8V (25°C) | 45 Ah | |
| Capacity (25°C) | 20 Hours rate/10.8V | 47.8 Ah |
| | 5 Hours rate/10.8V | 38.4 Ah |
| Terminal type | T14 | |
| Torque | 5.1±0.6 N.m | |
| Approx. internal resistance (25°C) | 7.5 mΩ | |
| Dimensions | Length | 197±2 mm (77.5 inch) |
| | Width | 165±2 mm (65 inch) |
| | Height | 170±2 mm (67 inch) |
| | Total height | 170±2 mm (67 inch) |
| Design Life (stand-by) | JIS at 25°C | 10 years |
| | Eurobat at 20°C | 10/12 years |
| Weight | 14.5 kg (31.96lbs) ±3% | |
| Nominal operating temperature | 25°C±3 (77±5°F) | |
| Operating temperature range | Discharge | -15°C~50°C (5°F~122°F) |
| | Charge | -10°C~50°C (14°F~122°F) |
| | Storage | -20°C~50°C (-4°F~122°F) |
| Float charging voltage at 25°C | 13.5V~13.8V | |
| Cyclic charging voltage at 25°C | 14.5V~14.7V | |
| Temperature compensation | Float charge | -18 |
| | Cycle charge | -30 |
| Max. charging current (A) | 12A | |
| Max. discharge current for 5 seconds | 400A | |
| Self discharge rate (25°C) | ≤3%/month | |
| Battery container ABS UL94-HB | V-0 optional | |

DIMENSIONS AND TERMINAL



CONSTRUCTION

| Component | Positive Plate | Negative plate | Container | Separator | Electrolyte | Safety valve | Terminal |
|--------------|----------------|----------------|----------------|-----------|-------------------|--------------|----------|
| Raw material | Lead dioxide | Lead | ABS (V-0 opt.) | AGM | Sulfuric Acid Gel | Rubber | Copper |

CONSTANT CURRENT DISCHARGE CHARACTERISTICS AT 25°C

Ampere

| F.V/Time | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V | 100 | 77.1 | 46.1 | 28.4 | 16.4 | 11.8 | 9.46 | 8.08 | 5.55 | 4.58 | 2.43 |
| 9.90V | 97.1 | 75.3 | 45.2 | 27.9 | 16.3 | 11.8 | 9.40 | 8.03 | 5.52 | 4.57 | 2.42 |
| 10.2V | 93.1 | 72.5 | 43.8 | 27.2 | 16.2 | 11.7 | 9.33 | 7.98 | 5.48 | 4.56 | 2.42 |
| 10.5V | 89.1 | 70.0 | 42.8 | 26.4 | 16.0 | 11.6 | 9.27 | 7.92 | 5.45 | 4.53 | 2.40 |
| 10.8V | 84.1 | 66.3 | 41.2 | 25.5 | 15.6 | 11.3 | 8.99 | 7.68 | 5.28 | 4.50 | 2.39 |

CONSTANT POWER DISCHARGE CHARACTERISTICS AT 25°C

Watts

| F.V/Time | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|-----|-----|-----|------|------|------|------|
| 9.60V | 1081 | 847 | 518 | 323 | 190 | 139 | 111 | 95.5 | 66.0 | 54.7 | 29.1 |
| 9.90V | 1048 | 826 | 507 | 319 | 189 | 138 | 111 | 94.9 | 65.6 | 54.6 | 29.1 |
| 10.2V | 1005 | 796 | 492 | 310 | 188 | 137 | 110 | 94.3 | 65.1 | 54.4 | 29.0 |
| 10.5V | 962 | 769 | 480 | 301 | 185 | 137 | 109 | 93.6 | 64.7 | 54.1 | 28.8 |
| 10.8V | 908 | 728 | 462 | 291 | 180 | 132 | 106 | 90.8 | 62.7 | 53.7 | 28.6 |

The characteristics mentioned above are based on average values observed over three charge and discharge cycles. It's essential to ensure the batteries are fully charged before conducting tests. Information in this document may change without prior notice and becomes binding only after receiving written confirmation. For the most recent version, kindly reach out to Mundilec.

<https://www.reguerobaterias.es>



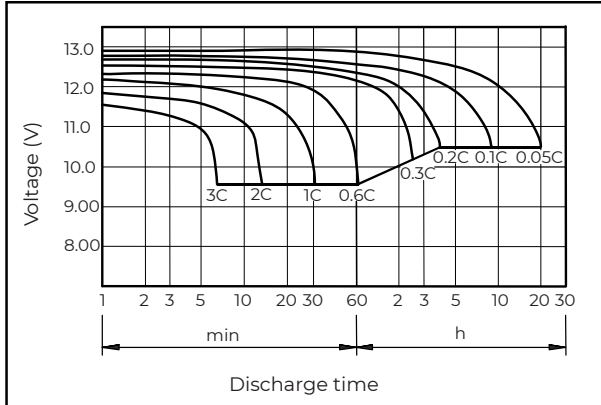
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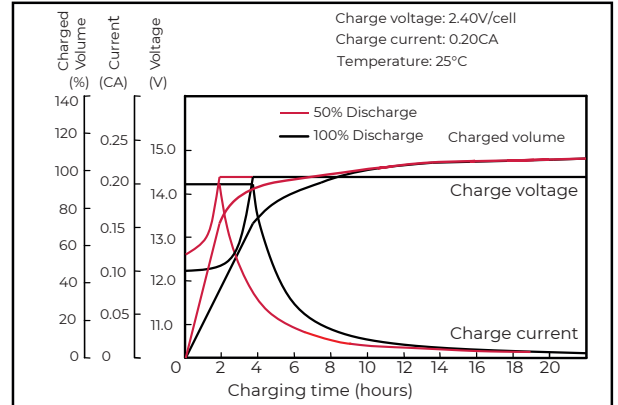
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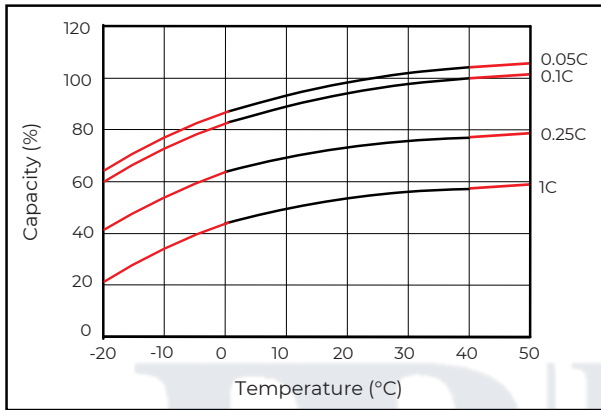
DISCHARGE CHARACTERISTICS AT 25°C



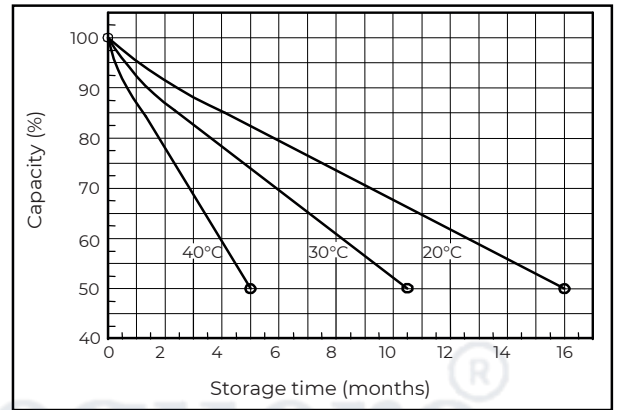
CHARGING CHARACTERISTICS AT 25°C



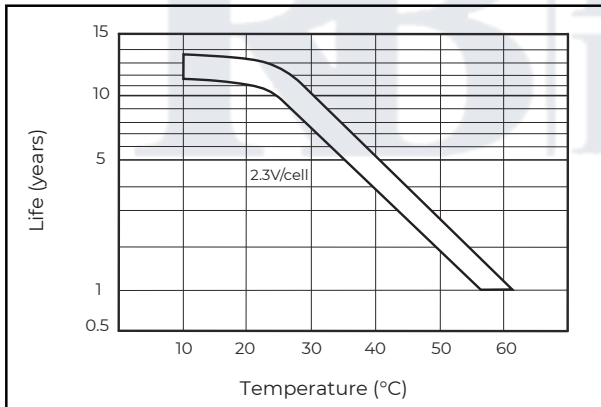
TEMPERATURE EFFECTS ON CAPACITY



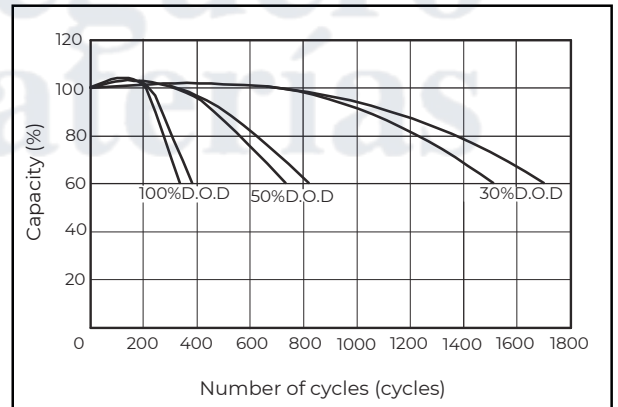
SELF-DISCHARGE CHARACTERISTICS



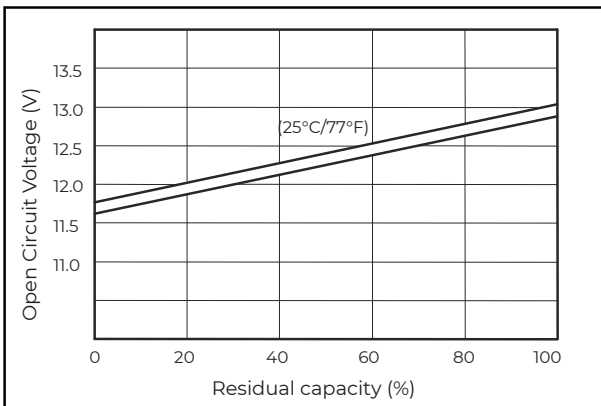
FLOATING LIFE ON TEMPERATURE



CYCLE LIFE ON D.O.D. AT 25°C



OCV VS CAPACITY AT 25°C



CHARGING VOLTAGE VS TEMPERATURE

