



GOLF CART BATTERY EV Series

EV12-95



The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

Battery Construction

| | | | | | | | | |
|---------------------------|--------------------------------|------------------------|------------------|--------------|------------------------|--------------------|-------------------------|------------------------------|
| COMPONENT Raw material | POSITIVE PLATE Lead dioxide | NEGATIVE PLATE Lead | CONTAINER ABS | COVER ABS | SAFETY VALVE Rubber | TERMINAL Copper | SEPARATOR Fiberglass | ELECTROLYTE Sulfuric acid |
|---------------------------|--------------------------------|------------------------|------------------|--------------|------------------------|--------------------|-------------------------|------------------------------|

Performance Characteristics

- **Nominal Voltage** 12V
- **Ampere Hour Capacity**
 - 20 Hours rate (5A, 10.8V) 100Ah
 - 10 Hours rate (9.5A, 10.8V) 95Ah
 - 5 Hours rate (17A, 10.5V) 85Ah
- **Minutes of Discharge**
 - 25A to 10.2V 195
 - 75A to 9.6V 50
 - 100A to 9.6V 32
 - 56A to 9.6V 75
 - 85A to 9.6V 45
- **Cranking Amps**
 - 32°F/0°C 600
 - 0°F/-18°C 450
- **Internal Resistance**
 - Fully charged battery (77°F/25°C) 4.7mΩ
- **Self-Discharge (68°F/20°C)**
 - Capacity declined per month 3%
- **Opening temperature Range**
 - Discharge -20 ~ 60°C
 - Charge -10 ~ 50°C
 - Storage -20 ~ 60°C
- **Max. discharge current (77°F/25°C)** 750A(5S)
- **Short Circuit Current** 2800A
- **Charge Methods: constant voltage charge (77°F/25°C)**
 - Cycle use 14.4 ~ 14.7V
 - Max. Current 24A
 - Standby use 13.6 ~ 13.8V

General Features

- **Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.**
- **Not restricted for air transport-complies with IATA/ICAO Special Provision A67.**
- **A recognized component of CE and UL**
- **Computer designed lead, calcium tin alloy grid for high power density.**
- **Long service life, float or cyclic applications.**
- **Maintenance-free operation.**
- **Low self discharge**
- **Design Life 10 years**

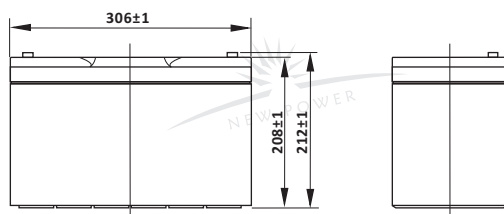
Constant Current Discharge (Amperes at 77°F/25°C)

| V/cell | 5min | 10min | 15min | 30min | 45min | 1h | 3h | 5h | 10h |
|--------|------|-------|-------|-------|-------|------|------|------|------|
| 1.60 | 330 | 210 | 161 | 105 | 82.2 | 65.8 | 27.9 | 17.8 | 9.90 |
| 1.65 | 308 | 199 | 154 | 102 | 80.4 | 64.5 | 27.6 | 17.6 | 9.90 |
| 1.70 | 285 | 188 | 145 | 98.0 | 77.9 | 63.1 | 27.1 | 17.3 | 9.80 |
| 1.75 | 262 | 177 | 137 | 94.0 | 75.0 | 61.4 | 26.7 | 17.0 | 9.70 |
| 1.80 | 237 | 163 | 128 | 90.2 | 72.2 | 59.6 | 26.1 | 16.6 | 9.50 |

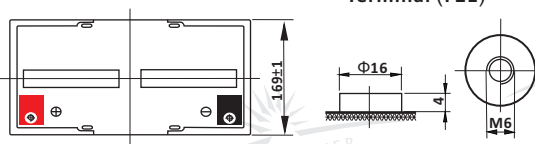
Constant Power Discharge (Watts at 77°F/25°C)

| V/cell | 5min | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 5h |
|--------|------|-------|-------|-------|-------|-----|------|------|------|
| 1.60 | 596 | 394 | 306 | 189 | 145 | 116 | 72.0 | 54.9 | 34.6 |
| 1.65 | 563 | 378 | 294 | 183 | 142 | 114 | 71.2 | 54.4 | 34.4 |
| 1.70 | 529 | 360 | 282 | 178 | 138 | 112 | 70.0 | 53.8 | 34.1 |
| 1.75 | 494 | 342 | 268 | 172 | 134 | 109 | 68.5 | 53.0 | 33.7 |
| 1.80 | 458 | 322 | 255 | 166 | 129 | 106 | 66.8 | 52.0 | 33.2 |

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



Terminal (F21)



Dimensions and Weight

| Type | Length | Width | Height | Total Height | Approx. Weight |
|---------------|----------|----------|----------|--------------|----------------|
| SI Units | 306mm | 169mm | 208mm | 212mm | 28.2Kg |
| English Units | 12.1inch | 6.65inch | 8.19inch | 8.35inch | 62.2lbs |



