

# EXCELLENT CYCLING ABILITY FOR MOBILITY



## 12-135G / E8G135-12

GELLED VALVE REGULATED LEAD ACID BATTERY (GVR) FOR CYCLING APPLICATIONS

12V 135AH @ 20 HR RATE to 1.75VPC 12V 150AH @ 100 HR RATE to 1.75VPC

# **DURATION**

MOBILITY SOLAR / PHOTOVOLTAIC MARINE TELECOMMUNICATION APPLICATIONS

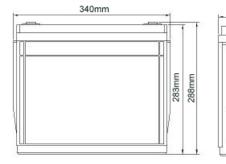
#### **Innovative Features**

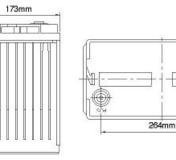
- Exceptional energy storage capacity combined with long life BCI Classification;
- Thick positive plate design for maximum service float life 12 years design life @ 20°C(68°F);
- Thickness positive plate plus optimized plate alloy to anti-corrosion;
- Maintenance-free (no topping up) during the whole service life due to EverExceed GEL technology;
- Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection;
- Flame-arresting one-way pressure-relief vent for safe and long life;
- Microporous rubber and corrugated PVC SiO2 separator, the special design increase the high porosity and anti-corrosion and decrease the internal resistance;
- Electrolyte in solid gel form will not stratify no equalization charge required;
- Sulfuric acid thixotropic gel, gel powder from Europe leading supplier to ensure the unique performance of gel battery;
- increased durability and deep cycle ability for heavy duty applications;
- ➡ Fully tank formed grid Lead Calcium Tin plate ensures voltage matching between cells;
- Shelf life up to 2 years at 20°C (68°F), very low gassing due to internal gas recombination;
- Can be used in any orientation. Upright, side or end mounting recommended;
- Unique performance against high temperature;
- E UL Recognized component;
- Spill-proof and leak-proof;

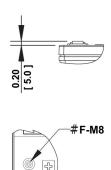
|                         | 12 VOLTS - 135 AMPERE HOUR @ 20 HOUR RATE |      |      |     |     |     |      |      |      |      |      |      |       |
|-------------------------|---|------|------|-----|-----|-----|------|------|------|------|------|------|-------|
|                         | AH Capacity to 1.75VPC @ 20°C (68°F)      |      |      |     |     |     |      |      |      |      |      |      |       |
| End Point<br>Volts/Cell | 1.5hr                                     | 2hr  | 3hr  | 4hr | 5hr | 8hr | 10hr | 12hr | 20hr | 24hr | 48hr | 72hr | 100hr |
| 1.75                    | 79.0                                      | 88.7 | 96.0 | 101 | 105 | 117 | 122  | 135  | 135  | 137  | 141  | 145  | 150   |

### Deep Cycle Gel Range VALR









#### Length:340mm Width: 173mm Height: 288mm

| Electrical Specifications |                  |                |             |                   |                       |                              |  |  |  |  |  |
|---------------------------|------------------|----------------|-------------|-------------------|-----------------------|------------------------------|--|--|--|--|--|
| Cells Per Unit            | Voltage Per Unit | Weight         | Electrolyte | CCA @ -18°C (0°F) | Short Circuit Current | Ohms Imped 60 Hz( $\Omega$ ) |  |  |  |  |  |
| 6                         | 12.84            | 87.5lbs 39.6kg | SG = 1.300  | 850 Amps          | 3650 Amps             | 0.0030                       |  |  |  |  |  |

| Capacity  | 135 Ah @ 20 hr. rate to 1.75 volts per cell @ 20°C (68°F).<br>150 Ah @ 100 hr. rate to 1.75 volts per cell @ 20°C (68°F).   |
|---|---|
| Applicable Operating Temperature Range              | -40°C (-40°F) to +70°C (158°F).   |
| Ideal Operating Temperature Range                   | +20°C (+68°F) to +35°C (+95°F ).  |
| Floating Charging Voltage                           | 13.5 to 13.8 VDC/unit Average at 25°C (77°F).   |
| Recommended Maximum Charging Current Limit          | 0.25C20 amperes (33.7 amperes @ 100% depth of discharge) @ 20 hr. rate to 1.75VPC.  |
| Equalization and Cycle Service Charging Voltage     | 14.1 to 14.4 VDC/unit Average at 25°C (77°F).   |
| Maximum AC Ripple (Charger)                         | 0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.<br>Maximum voltage allowed = 1.4% RMS (4% P-P).<br>Maximum current allowed = 6.75 amperes RMS (C/20) to 1.75VPC.     |
| Self Discharge                                      | EverExceed Deep Cycle Gel Range batteries may be stored for up to 24 months at 20°C (68°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |
| Accessories   | Inter unit connectors racks and cabinet systems are available.  |
| Terminal: Inserted                                  | Threaded copper alloy insert terminal.  |
| Terminal Hardware Initial Torque: Inserted Terminal | 11 N-m  |

|                         | Constant Power Discharging Ratings - Watts Per Cell @ 20°C (68°F) |      |      |      |      |      |      |      |      |      |  |  |
|-------------------------|---|------|------|------|------|------|------|------|------|------|--|--|
| End Point<br>Volts/Cell | 1.5hr   | 2hr  | 3hr  | 4hr  | 5hr  | 8hr  | 10hr | 12hr | 20hr | 24hr |  |  |
| 1.85                    | 93.2  | 78.9 | 57.4 | 45.6 | 37.9 | 26.7 | 22.1 | 20.5 | 12.3 | 10.6 |  |  |
| 1.80                    | 98.1  | 83.1 | 60.5 | 48.0 | 39.9 | 28.1 | 23.3 | 21.8 | 13.1 | 11.1 |  |  |
| 1.75                    | 100   | 85.2 | 61.8 | 48.9 | 40.7 | 28.6 | 23.9 | 22.2 | 13.4 | 11.3 |  |  |

|                         | Constant Current Discharging Ratings - Amperes Per Cell @ 20°C (68°F) |      |      |      |      |      |      |      |      |      |      |      |       |  |
|-------------------------|---|------|------|------|------|------|------|------|------|------|------|------|-------|--|
| End Point<br>Volts/Cell | 1.5hr   | 2hr  | 3hr  | 4hr  | 5hr  | 8hr  | 10hr | 12hr | 20hr | 24hr | 48hr | 72hr | 100hr |  |
| 1.85                    | 48.5  | 40.8 | 29.5 | 23.2 | 19.2 | 13.4 | 11.1 | 10.2 | 6.14 | 5.28 | 2.76 | 1.90 | 1.42  |  |
| 1.80                    | 51.4  | 43.3 | 31.3 | 24.6 | 20.4 | 14.2 | 11.8 | 10.9 | 6.56 | 5.55 | 2.86 | 1.97 | 1.46  |  |
| 1.75                    | 52.7  | 44.3 | 32.0 | 25.2 | 20.9 | 14.6 | 12.2 | 11.3 | 6.75 | 5.72 | 2.94 | 2.01 | 1.50  |  |

Note: Batteries to be mounted with 0.39 in (1.00 cm) spacing minimum and free air ventilation.

Specifications subject to change without notification.