

# EXCELLENT CYCLING ABILITY

FOR

SOLAR / PHOTOVOLTAIC

WIND GENERATION

INVERTER / MOBILITY

TELECOMMUNICATION

APPLICATIONS



## DP-12165

SEALED VRLA MONOBLOC AGM BATTERIES  
VALVE REGULATED LEAD ACID BATTERY  
FOR CYCLING APPLICATIONS

**12V 165AH @ 20 HR RATE to 1.75VPC**

**12V 187AH @ 100 HR RATE to 1.75VPC**

# LONG DURATION

### Innovative Features

- ☑ Thick positive plate design and high Tin alloy~12 years design life @ 20°C(68°F).
- ☑ UL Recognized component.
- ☑ Valve regulated lead acid battery (VRLA).
- ☑ High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency.
- ☑ 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.
- ☑ Operates at a low internal pressure.
- ☑ Heavy duty insert copper terminals for ease of assembly, reduced maintenance and increased safety.
- ☑ Advanced lead tin calcium alloy, reduces grid corrosion and promotes long battery life.
- ☑ Standard: Reinforced ABS (UL 94HB) container and cover.  
Optional: Flame-retardant reinforced ABS container and cover compliant with U.L.94 V-0 with an Oxygen limiting Index of greater than 28%.
- ☑ Over-sized, through the partition inter-cell welds provide low resistance connections, with minimal power loss.
- ☑ Flame arresting, low pressure safety release venting system for individual cells, recognized per U.L. 924.
- ☑ Multicell design for ease of installation and maintenance.
- ☑ Horizontal or vertical operation.

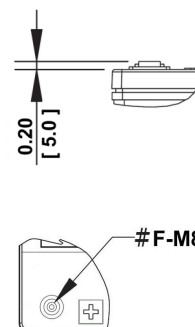
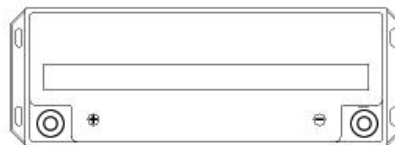
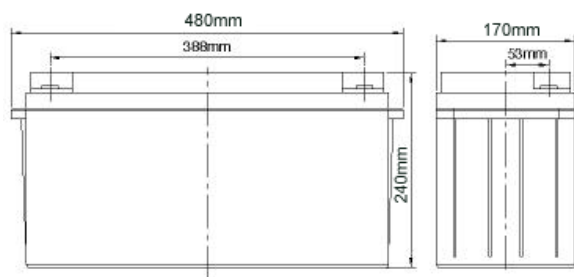
### 12 VOLTS - 165 AMPERE HOUR @ 20 HOUR RATE

#### 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 | 100hr |
|-------------------------|-------|-----|-----|-----|-----|-----|------|------|------|------|-------|
| 1.75                    | 105   | 114 | 121 | 127 | 131 | 143 | 148  | 151  | 165  | 167  | 187   |

# Deep Cycle AGM Range

**EverExceed®**  
power your applications



**Length: 480mm    Width: 170mm    Height: 240mm**

| Electrical Specifications |                  |                |             |                           |                       |                     |
|---------------------------|------------------|----------------|-------------|---------------------------|-----------------------|---------------------|
| Cells Per Unit            | Voltage Per Unit | Weight         | Electrolyte | Maximum Discharge Current | Short Circuit Current | Ohms Imped 60 Hz(Ω) |
| 6                         | 12.84            | 99.2lbs 45.0kg | SG = 1.300  | 1048 Amps                 | 4200 Amps             | 0.0025              |

|  |   |
|--|---|
| <b>Capacity</b>  | 165 Ah @ 20 hr. rate to 1.75 volts per cell @ 20°C (68°F).<br>187 Ah @ 100 hr. rate to 1.75 volts per cell @ 20°C (68°F).   |
| <b>Applicable Operating Temperature Range</b>              | -40°C (-40°F) to +70°C (158°F).   |
| <b>Ideal Operating Temperature Range</b>                   | +20°C (+68°F) to +30°C (+86°F).   |
| <b>Floating Charging Voltage</b>                           | 13.5 to 13.8 VDC/unit Average at 25°C (77°F).   |
| <b>Recommended Maximum Charging Current Limit</b>          | 0.25C20 amperes (41.3 amperes @ 100% depth of discharge) @ 20 hr. rate to 1.75VPC.  |
| <b>Equalization and Cycle Service Charging Voltage</b>     | 14.1 to 14.4 VDC/unit Average at 25°C (77°F).   |
| <b>Maximum AC Ripple (Charger)</b>                         | 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 = 8.25 amperes RMS (C/20) to 1.75VPC.     |
| <b>Self Discharge</b>                                      | EverExceed Deep Cycle AGM Range batteries may be stored for up to 12 months at 20°C (68°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |
| <b>Accessories</b>   | Inter unit connectors racks and cabinet systems are available.  |
| <b>Terminal: Inserted</b>                                  | Threaded copper alloy insert terminal.  |
| <b>Terminal Hardware Initial Torque: Inserted Terminal</b> | 11 N-m  |

| Constant Power Discharging Ratings - Watts Per Cell @ 20°C (68°F) |       |     |      |      |      |      |      |      |      |      |       |
|---|-------|-----|------|------|------|------|------|------|------|------|-------|
| End Point Volts/Cell  | 1.5hr | 2hr | 3hr  | 4hr  | 5hr  | 8hr  | 10hr | 12hr | 20hr | 24hr | 100hr |
| 1.85  | 124   | 100 | 72.7 | 57.9 | 48.2 | 32.7 | 27.2 | 23.3 | 15.5 | 13.0 | 3.42  |
| 1.80  | 133   | 105 | 75.4 | 59.8 | 49.9 | 34.0 | 28.4 | 24.2 | 15.8 | 13.4 | 3.61  |
| 1.75  | 135   | 107 | 77.6 | 61.9 | 50.7 | 34.9 | 29.0 | 24.7 | 16.2 | 13.8 | 3.74  |

| Constant Current Discharging Ratings - Amperes Per Cell @ 20°C (68°F) |       |      |      |      |      |      |      |      |      |      |       |
|---|-------|------|------|------|------|------|------|------|------|------|-------|
| End Point Volts/Cell  | 1.5hr | 2hr  | 3hr  | 4hr  | 5hr  | 8hr  | 10hr | 12hr | 20hr | 24hr | 100hr |
| 1.85  | 64.9  | 51.8 | 37.3 | 29.5 | 24.3 | 16.3 | 13.5 | 11.4 | 7.53 | 6.35 | 1.70  |
| 1.80  | 69.1  | 55.0 | 39.4 | 30.7 | 25.4 | 17.2 | 14.4 | 12.2 | 8.07 | 6.80 | 1.83  |
| 1.75  | 69.7  | 56.8 | 40.3 | 31.8 | 26.1 | 17.9 | 14.8 | 12.6 | 8.25 | 6.95 | 1.87  |

**Note:** Batteries to be mounted with 0.39 in (1.00 cm) spacing minimum and free air ventilation.  
Specifications subject to change without notification.