

# EXCELLENT CYCLING ABILITY

FOR  
SOLAR / PHOTOVOLTAIC  
WIND GENERATION  
INVERTER / MOBILITY  
TELECOMMUNICATION  
APPLICATIONS



## DP-6165

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

**6V 165AH @ 20 HR RATE to 1.75VPC**

**6V 181AH @ 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).
- ◆ 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.

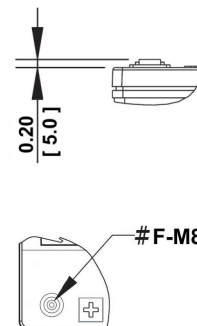
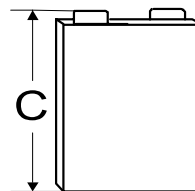
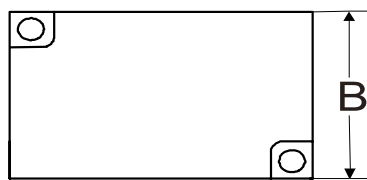
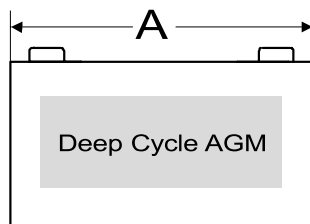
**6 VOLTS - 165 AMPERE HOUR @ 20 HOUR RATE**

**AH Capacity to 1.75VPC @ 20°C (68°F)**

End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr	100hr
1.75	106	112	121	128	130	143	148	152	165	168	181

# Deep Cycle AGM Range

**EverExceed®**  
power your applications



Length(A): 260mm Width(B): 180mm Height(C): 252mm

Electrical Specifications						
Cells Per Unit	Voltage Per Unit	Weight	Electrolyte	Maximum Discharge Current(5s)	Short Circuit Current	Internal Resistance Milli-ohms
3	6.42	48.4lbs 22.0kg	SG = 1.300	1485 Amps	4500 Amps	3.2

Capacity	165 Ah @ 20 hr. rate to 1.75 volts per cell @ 20°C (68°F). 181 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 +30°C (+86°F).
Floating Charging Voltage	6.75 to 6.90 VDC/unit Average at 20°C (77°F).
Recommended Maximum Charging Current Limit	33Amperes ( 0.20C20 Amperes )
Equalization and Cycle Service Charging Voltage	7.05 to 7.20 VDC/unit Average at 20°C (77°F).
Maximum AC Ripple (Charger)	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results. Maximum voltage allowed = 1.4% RMS (4% P-P). Maximum current allowed = 0.82 amperes RMS (C/20) to 1.75VPC.
Self Discharge	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.
Accessories	F-M8 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

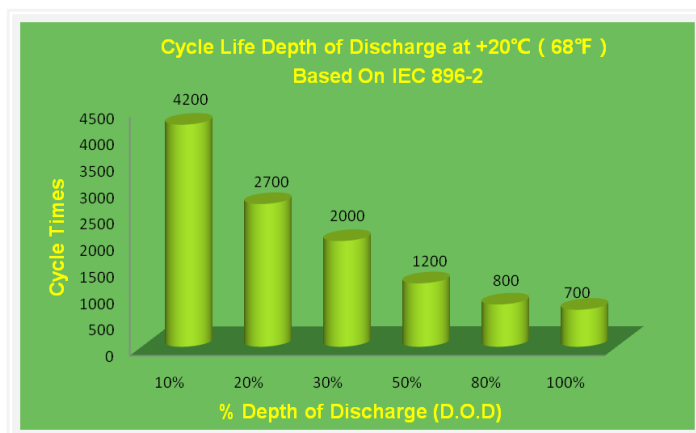
Constant Power Discharging Ratings - Watts Per Cell @ 20°C (68°F)											
End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr	100hr
1.85	125	101	72.2	57.3	47.5	32.8	27.5	23.8	15.5	12.9	3.40
1.80	133	106	75.8	59.9	50.0	34.2	28.4	24.5	16.1	13.5	3.65
1.75	138	110	77.2	61.4	50.9	35.0	29.2	24.8	16.4	13.8	3.76

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	64.6	51.8	37.1	29.3	24.4	16.3	13.4	11.4	7.53	6.36	1.71
1.80	69.1	54.7	39.0	30.7	25.5	17.1	14.4	12.2	7.96	6.72	1.80
1.75	70.3	56.1	40.3	31.9	26.1	17.9	14.8	12.6	8.25	6.95	1.81

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

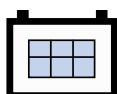
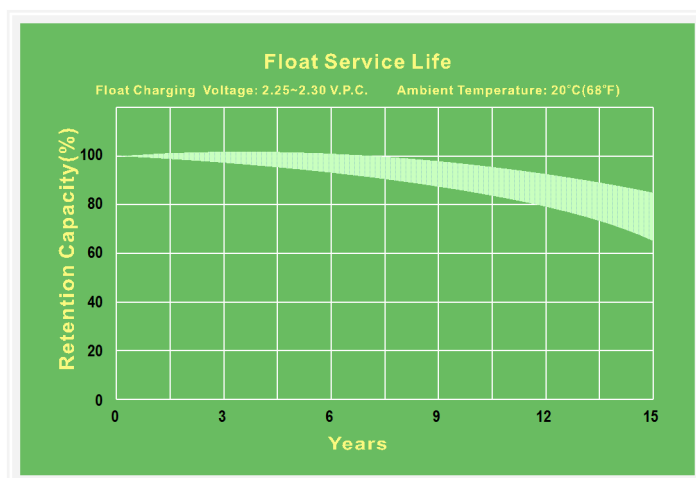
# Deep Cycle AGM Range

**EverExceed®**  
power your applications

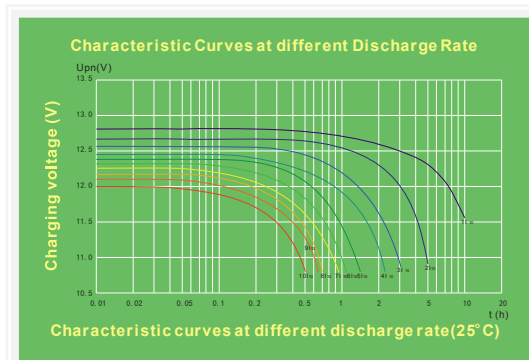


**TYPICAL CYCLIC PERFORMANCE**

CAPACITY WITHDRAWN	CYCLES
100%	700
80%	800
50%	1200
25%	2100
10%	4200

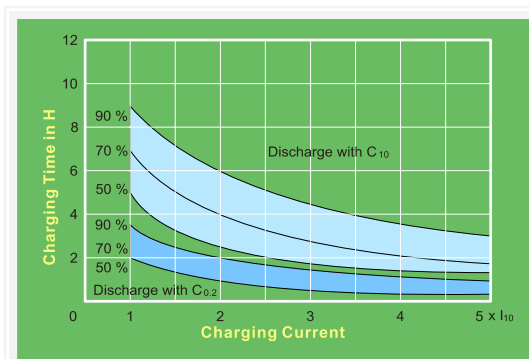


**EverExceed®**  
*power your applications*

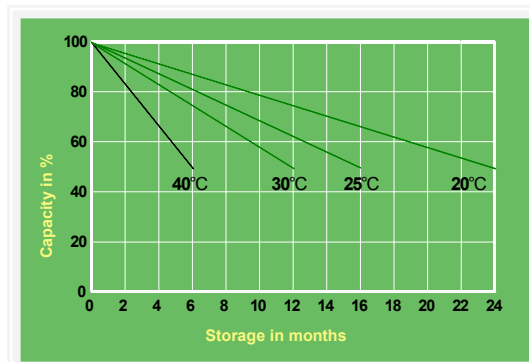


Constant Voltage charging is recommended  
Recommended float voltage: 2.27VPC @ 25°C(77°F)  
Float Voltage Range: 2.25VPC to 2.30 VPC @ 25°C(77°F)  
Equalize voltage: 2.35VPC for 12 Hours

Apply for temperature range of 0°C / 32°F to 40°C / 104°F. Subtract 3 mV / °C / cell or 1.7 mV / °F / cell, above 25°C / 77°F. Add 3mV / °C / cell or 1.7 mV / °F / cell, below 25°C / 77°F.



Recharging time in dependence of charging current (guide values) for up to 50, 70 and 90% of capacity at 25°C and with a charging voltage of 2.27 V/cell.



Self-discharge in relation to the storage temperature.

