

# EXCELLENT CYCLING ABILITY

FOR  
SOLAR / PHOTOVOLTAIC  
WIND GENERATION  
INVERTER / MOBILITY  
TELECOMMUNICATION  
APPLICATIONS



## SPL100-12DC

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

12V 100AH @ 20 HR RATE to 1.75VPC

12V 110AH @ 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.

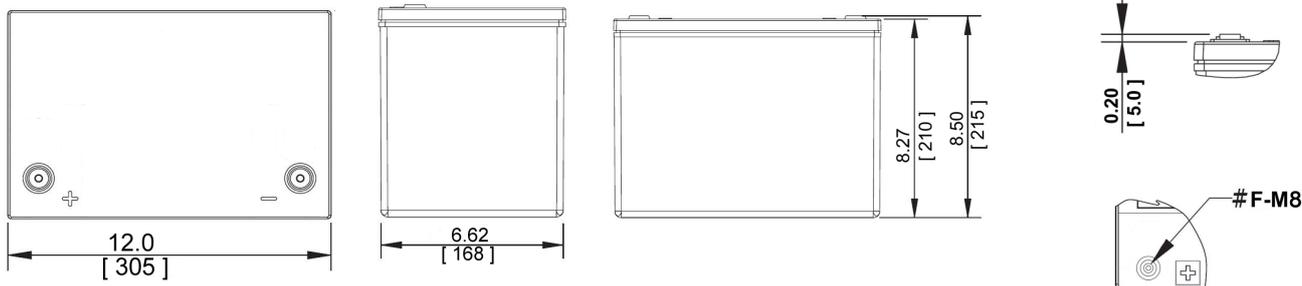
### 12 VOLTS - 100 AMPERE HOUR @ 20 HOUR RATE

#### 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	63.9	68.4	73.2	76.4	79.0	86.4	90.4	92.1	100	102	110

# Deep Cycle AGM Range

# SB BATTERY



## Electrical Specifications

Cells Per Unit	Voltage Per Unit	Weight	Electrolyte	Maximum Discharge Current	Short Circuit Current	Ohms Imped 60 Hz(Ω)
6	12.84	58.3lbs 26.5kg	SG = 1.300	635 Amps	2650 Amps	0.0040

<b>Capacity</b>	100 Ah @ 20 hr. rate to 1.75 volts per cell @ 20°C (68°F). 110Ah @ 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 (25.0 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. Maximum voltage allowed = 1.4% RMS (4% P-P). Maximum current allowed = 5.00 amperes RMS (C/20) to 1.75VPC.
<b>Self Discharge</b>	S.B 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>	9 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	79.2	61.1	43.9	34.5	28.9	20.0	16.7	14.2	9.30	7.82	2.12
1.80	83.3	64.0	46.2	36.4	30.2	20.9	17.4	14.8	9.75	8.24	2.22
1.75	86.1	65.7	47.1	37.1	30.9	21.2	17.6	15.2	9.91	8.36	2.28

## 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	39.2	31.5	22.4	17.6	14.6	9.95	8.25	7.16	4.65	3.95	1.05
1.80	41.9	33.4	23.8	18.7	15.5	10.5	8.77	7.46	4.87	4.13	1.08
1.75	42.6	34.2	24.4	19.1	15.8	10.8	9.04	7.68	5.00	4.24	1.10

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