

# Valve Regulated Sealed Lead-acid Battery (PBD Series Gel Battery)

12V / 100Ah | 12V / 150Ah | 12V / 200Ah



## Features

- Enhanced battery performance through high-tin positive plate alloy design and nanosilica colloidal electrolyte.
- Superior high and low-temperature performance with a relatively rich electrolyte.
- Excellent charge acceptance capability.
- Long cycle life and outstanding deep cycle discharge ability.
- Low self-discharge rate.
- Maintenance-free with precision sealing technology and a valve-sealed design eliminating free electrolyte.
- Prolonged cycle life by eliminating acid stratification through nanometer gel electrolytes.

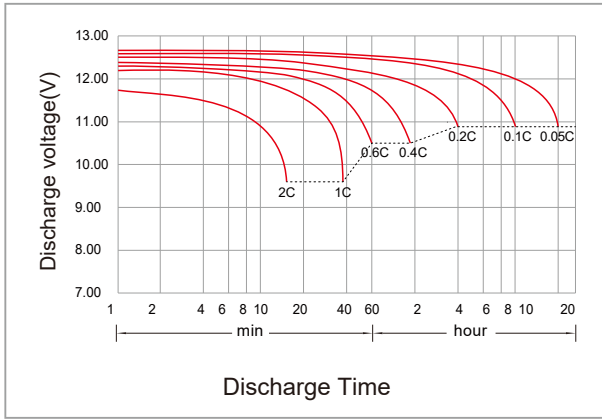
## Specifications

Model	MR-PBD12-100	MR-PBD12-150	MR-PBD12-200
Nominal Voltage	12V		
Nominal Capacity	100Ah	150Ah	200Ah
Rated Capacity	100Ah (10hr, 10.0A, 10.8V)	150Ah (10hr, 15.0A, 10.8V)	200Ah (10hr, 20.0A, 10.8V)
	78.9Ah (3hr, 26.3A, 10.8V)	119Ah (3hr, 39.5A, 10.8V)	158Ah (3hr, 52.6A, 10.8V)
	64.2Ah (1hr, 64.2A, 10.5V)	96.2Ah (1hr, 96.2A, 10.5V)	128Ah (1hr, 128.0A, 10.5V)
Terminal	M8		
Approx. Internal Resistance	5.2 mΩ	3.6 mΩ	3.2 mΩ
Approx. Weight	29.5kg	45.0kg	61.5kg
Container Material	ABS		
Design Life	12 years		
Max. Discharge Current	1200A (5sec)	1800A (5sec)	2400A (5sec)
Max. Charging Current	25.0A	37.5A	50.0A
Float Charging Voltage	13.5V – 13.8V @ 25°C		
Cycle Use Voltage	14.4V – 15V @ 25°C		
Nominal Operating Temperature Range	25°C±5°C		
Operating Temperature Range	Discharge: -40°C – 60°C (-104°F – 140°F)		
	Charge: -20°C – 50°C (-68°F – 122°F)		
	Storage: -20°C – 50°C (-68°F – 122°F)		
Self Discharge	3% of capacity declined per month at 25°C		

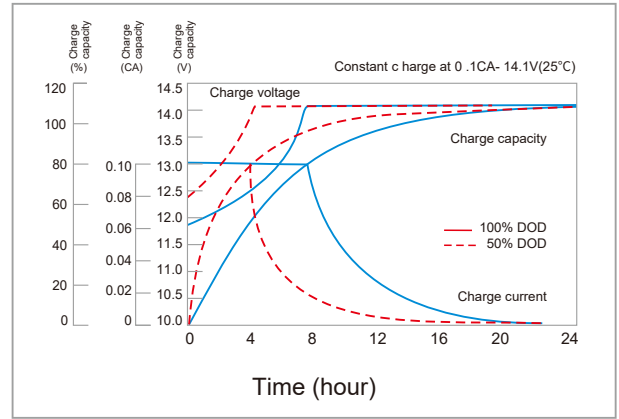
# Valve Regulated Sealed Lead-acid Battery (Deep Cycle Series)

12V / 100Ah | 12V / 150Ah | 12V / 200Ah

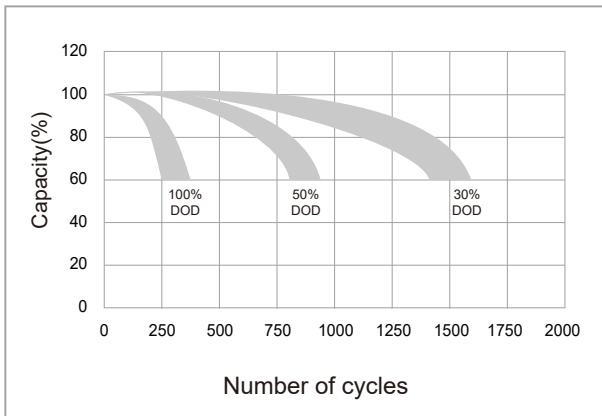
## Discharge Characteristic



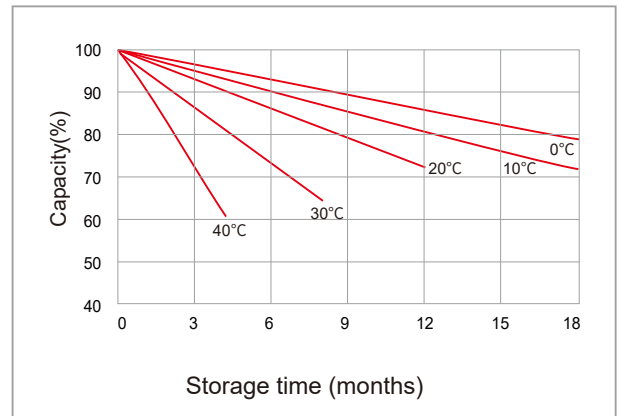
## Charging Characteristic



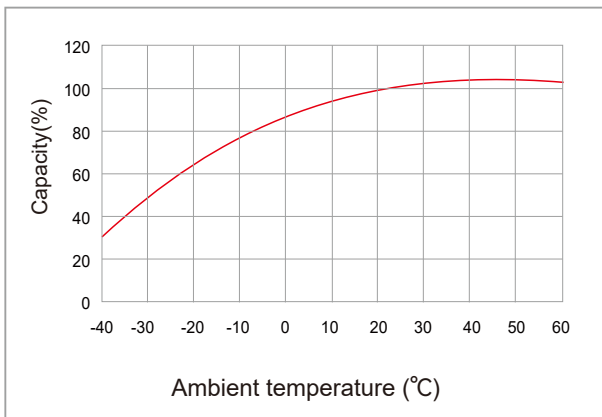
## The Effect of Discharge Depth On Cycle Life



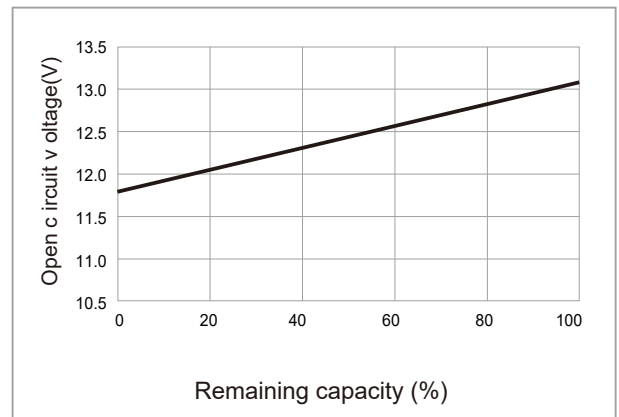
## Curves of Self-discharge



## The Effect of Temperature On Capacity



## Curves of Open Circuit Voltage Vs. Capacity



### Note:

All above information shall be changed without prior notice, MARSRIVA reserves the right to explain and update the latest information.