



## MB series

MB Series Valve Regulated Lead Acid batteries are designed with AGM (Absorbent Glass Mat) technology, high performance plates and electrolyte to gain extra power output for common power backup system applications widely used in the field of UPS, Emergency Lighting System.

## General Features

- Sealed and maintenance free operation
- Non-Spillable construction design
- ABS containers and cover (UL94HB, UL94V-0) optional
- Safety valve installation for explosion proof
- High quality and high reliability
- Exceptional deep discharge recovery performance
- Low self discharge characteristic
- Flexibility design for multiple install positions

## Application

- Medical Equipmen
- UPS
- Communication Equipment
- Control Equipment
- Toys
- Alarm System
- Cable Television
- Power tools
- Emergency Power System
- Security System

## Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

## Constant current discharge ratings-amperes at 25 °C

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	12.4	8.71	6.63	3.73	2.30	0.96	0.63	0.359	0.184
1.65V	11.8	8.32	6.31	3.59	2.26	0.93	0.61	0.353	0.180
1.70V	11.1	7.86	5.99	3.43	2.20	0.90	0.60	0.346	0.177
1.75V	10.4	7.39	5.66	3.26	2.11	0.86	0.58	0.341	0.175
1.80V	9.72	7.00	5.34	3.10	2.01	0.82	0.56	0.334	0.172

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	23.0	16.1	12.3	6.98	4.33	1.82	1.20	0.69	0.35
1.65V	21.8	15.3	11.7	6.67	4.22	1.75	1.16	0.67	0.34
1.70V	20.4	14.4	11.0	6.35	4.09	1.69	1.12	0.65	0.34
1.75V	19.0	13.4	10.4	6.00	3.90	1.61	1.08	0.64	0.33
1.80V	17.5	12.6	9.66	5.63	3.67	1.52	1.04	0.62	0.32

### Technology Parameter

Battery model	MB3.5Ah-4V			
Designed Floating Life	3~5 Years			
Capacity (25°C)	20hR(0.175A, 3.50V)	10hR(0.341A, 3.50 V)	5hR(0.58A, 3.50V)	1hR(2.3A, 3.20V)
	3.5Ah	3.41Ah	2.9Ah	2.3Ah
Dimensions	Length	Width	Height	Total Height
	90±1mm	34±1mm	59±1mm	64±1mm
Approx. weight (±5%)	0.46Kg (1.015 lbs)			
Internal resistance	Full charged at 25°C: Approx .30mOhms			
Self discharge	3% of capacity declined per month at 25°C (average)			
Capacity Affected by Temp.(20HR)	40 °C	25 °C	0 °C	-15 °C
	102%	100%	85%	65%
Charge Voltage (25°C)	Cycle use		Float use	
	4.80-4.90V(-15mV/°C), max. Current: 1.05A		4.50-4.60V(-10mV/°C)	

