

#### MHB MM Series—Medium-size Battery

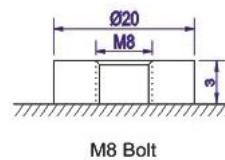
- High performance, completely maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula and updated manufacturing technique
- Floating & standby use: up to 8 years
- Cycle use 1: Up to 260 cycles at 100% DOD
- Cycle use 2: Up to 500 cycles at 50% DOD

#### Application:

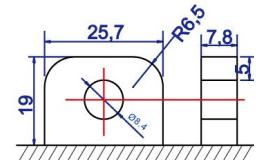
- Telecommunications
- Alarm and security system
- Uninterruptable Power Supply (UPS)
- Communication power supply
- Electric Power System (EPS)
- DC power supply
- Emergency backup power supply
- Auto control system

#### Construction:

- Component .....Raw material
- Sealant .....Epoxy
- Positive .....Lead dioxide
- Safety valve .... Rubber
- Negative .....Lead
- Terminal .....Copper/Pb
- Container .....ABS
- Separator .....Fiber glass
- Cover .....ABS
- Electrolyte ..... Sulfuric acid



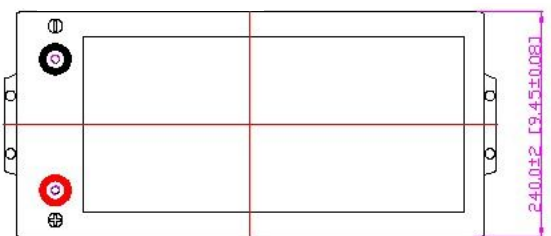
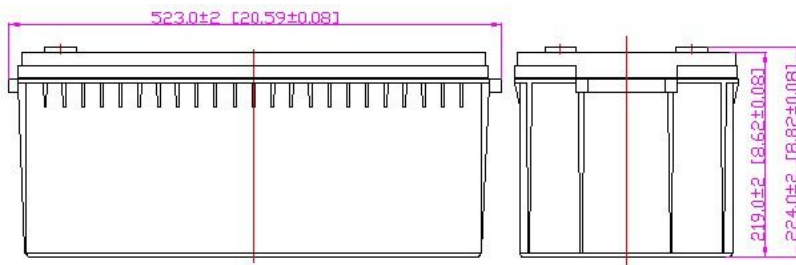
M8 Bolt



M8 Bolt

B5 Terminal

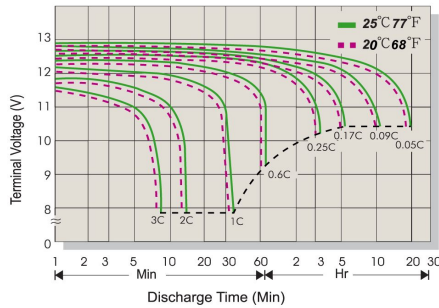
T19 Terminal



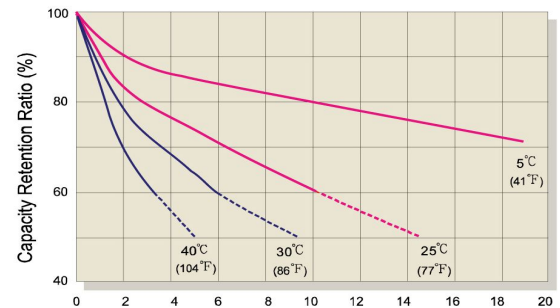
#### Speification:

Battery Model	MM200-12A 12V200AH			
Designed Floating Life	Up to 8 Years			
Capacity (25°C)	20HR(10.640A,10.8V)	10HR(20.000A,10.8V)	5HR(35.630A,10.5V)	1HR(110.140A,10.5V)
	212.80 AH	200.00 AH	178.15 AH	110.14 AH
Dimensions	Length	Width	Height	Total Height
	523 mm	240 mm	219 mm	223 mm
Approx. Weight	60.00 KG ±3%			
Internal Resistance	Full charged at 25°C: ≤4.80 mΩ			
Self Discharge	2% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25oC)	Cycle use		Float use	
	14.4-14.6V(-30mV/°C), max. Current:60.00A		13.5-13.8V (-20mV/°C)	

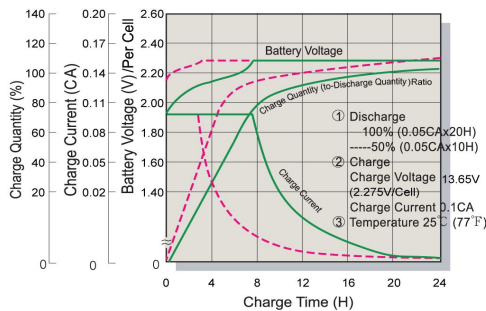
### Terminal Voltage (V) and Discharge Time



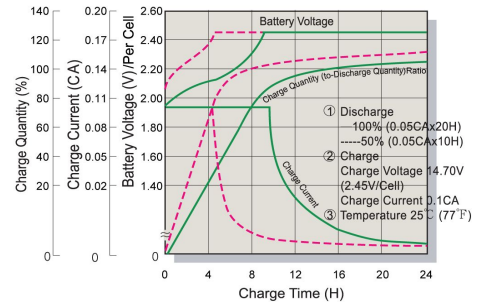
### Capacity Retention Characteristic



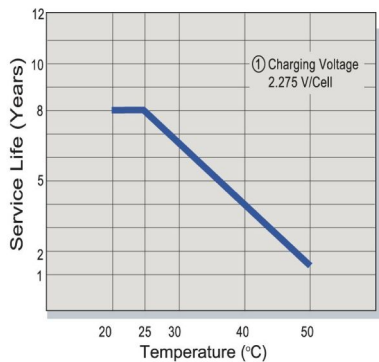
### Battery Voltage and Charge Time for Standby Use



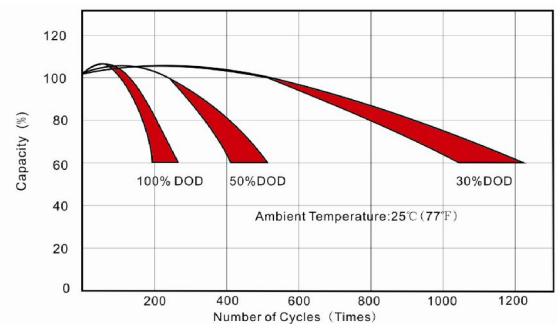
### Battery Voltage and Charge Time for Cycle Use



### Tickle(or Float) Service Life



### Cycle Service Life



### Constant Current Discharge(CC,Unit:A) at 25°C(77°F)

F.V/Time	5Min	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.80V/Cell	629.2	428.1	293.1	178.24	109.21	68.16	52.99	41.68	35.33	23.60	20.00	10.64
1.75V/Cell	634.6	431.7	295.6	179.75	110.14	68.74	53.44	42.03	35.63	23.80	20.36	10.80
1.70V/Cell	650.4	442.5	303.0	184.25	112.89	70.45	54.77	43.08	36.52	24.40	20.66	10.96
1.67V/Cell	666.3	453.3	310.4	188.74	115.65	72.17	56.11	44.13	37.41	24.99	20.92	11.12
1.60V/Cell	696.0	473.5	324.2	197.14	120.79	75.39	58.61	46.10	39.07	26.10	21.38	11.28

### Constant Power Discharge (CP,Unit:W) at 25°C(77°F)

F.V/Time	5Min	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.80V/Cell	1227	835	572	347.6	213.0	132.91	103.33	81.27	68.89	46.02	39.00	20.74
1.75V/Cell	1237	842	576	350.5	214.8	134.03	104.21	81.96	69.47	46.41	39.70	21.06
1.70V/Cell	1268	863	591	359.3	220.1	137.39	106.81	84.01	71.21	47.57	40.29	21.37
1.67V/Cell	1299	884	605	368.0	225.5	140.74	109.42	86.06	72.94	48.73	40.79	21.68
1.60V/Cell	1357	923	632	384.4	235.5	147.00	114.29	89.89	76.19	50.90	41.69	21.99