

MS Series SLA Battery

MHB MS Series--Small-size batteries

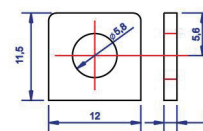
- 100% before shipment testing, stable and reliable long-term quality
- patented grid alloy formula and updated manufacturing technique
- completely sealed and maintenance-free, low self-discharge
- Excellent charging and re-charging acceptance
- Cycle use: More than 260 cycles at 100% DOD
- Floating & standby use: 3-5 years

Application:

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

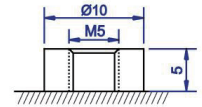
Construction:

- ComponentRaw material
- PositiveLead dioxide
- NegativeLead
- ContainerABS
- CoverABS
- SealantEpoxy
- Safety valve Rubber
- TerminalCopper
- SeparatorFiber glass
- ElectrolyteSulfuric acid



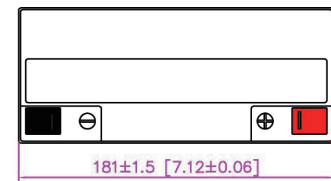
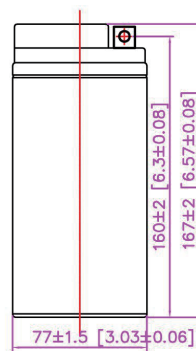
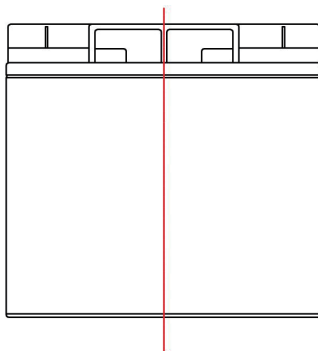
M5 Bolt & Nut

T1 Terminal



M5 Bolt

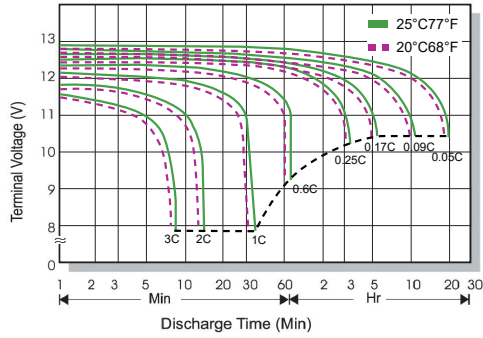
B1 Terminal



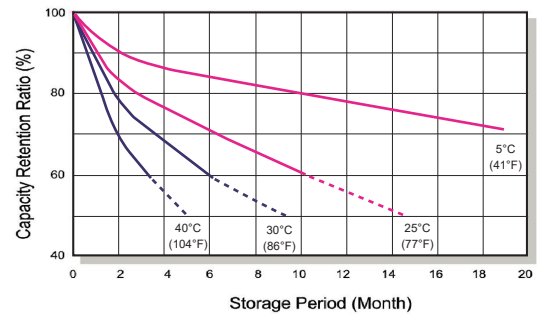
Speification:

Battery Model	MS 20-12 12V18AH			
Designed Floating Life	3~5 Years			
Capacity (25°C)	20HR(0.900A,10.5V)	10HR(1.739A,10.5V)	5HR(3.416A,10.5V)	1HR(11.671A,10.5V)
	18.00 AH	17.39AH	17.08AH	11.671AH
Dimensions	Length	Width	Height	Total Height
	181 mm	77 mm	167 mm	167 mm
Approx. Weight	5.50Kg ±3%			
Internal Resistance	Full charged at 25°C : ≤16.20 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	
	14.4-15.0V(-30mV/°C), max. Current:2.70A		13.5-13.8V (-20mV/°C)	

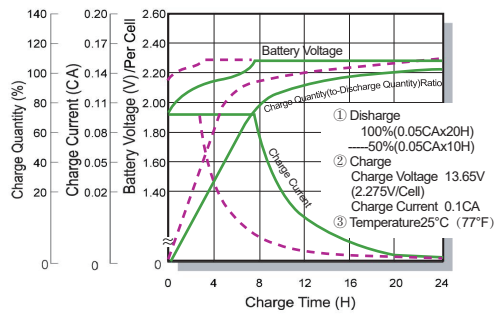
Terminal Voltage (V) and Discharge Time



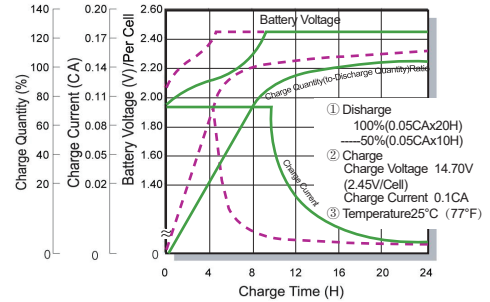
Capacity Retention Characteristic



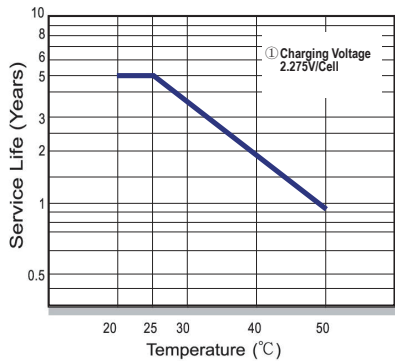
Battery Voltage and Charge Time for Standby Use



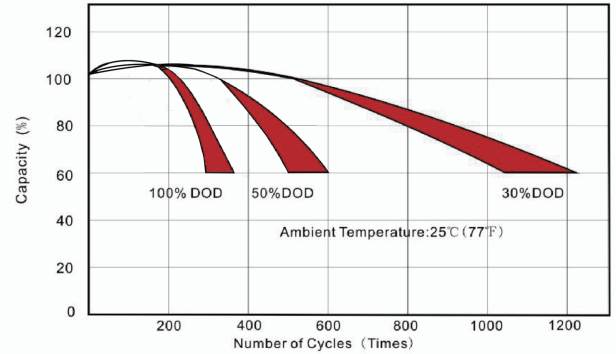
Battery Voltage and Charge Time for Cycle Use



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	58.33	40.49	33.26	19.94	11.457	6.148	5.074	3.877	3.353	2.679	1.707	0.883
1.75V/Cell	59.43	41.25	33.89	20.31	11.671	6.263	5.169	3.949	3.416	2.729	1.739	0.900
1.70V/Cell	61.21	42.49	34.90	20.91	12.021	6.451	5.324	4.068	3.519	2.810	1.791	0.927
1.67V/Cell	63.59	44.14	36.26	21.73	12.489	6.702	5.531	4.226	3.656	2.919	1.861	0.963
1.60V/Cell	67.16	46.61	38.29	22.95	13.189	7.078	5.842	4.463	3.861	3.083	1.965	1.017

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	113.79	78.95	64.87	38.87	22.340	11.989	9.891	7.563	6.544	5.225	3.327	1.720
1.75V/Cell	115.88	80.44	66.08	39.61	22.759	12.209	10.081	7.703	6.664	5.325	3.387	1.760
1.70V/Cell	119.37	82.85	68.06	40.79	23.439	12.579	10.381	7.933	6.864	5.475	3.497	1.810
1.67V/Cell	123.95	86.07	70.70	42.38	24.348	13.068	10.790	8.243	7.124	5.695	3.627	1.880
1.60V/Cell	130.93	90.89	74.67	44.75	25.717	13.798	11.390	8.702	7.523	6.015	3.837	1.980