

MHB MN Series—Deep Cycle SLA Battery

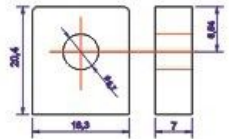
- completely sealed and maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula, Gelled electrolyte formula and updated manufacturing technique
- Floating & standby use: up to 10 years
- Cycle use 1: More than 350 cycles at 100% DOD
- Cycle use 2: More than 1800 cycles at 30% DOD

Application:

- Telecommunications
- UPS/EPS
- DC Power Supply
- Solar system
- Wind Power System
- Auto Control System

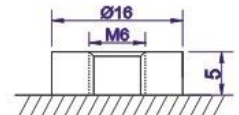
Construction:

- ComponentRaw material
- PositiveLead dioxide
- NegativeLead
- ContainerABS
- CoverABS
- SealantEpoxy
- Safety valve Rubber
- TerminalCopper/Pb
- SeparatorFiber glass
- Electrolyte Sulfuric acid



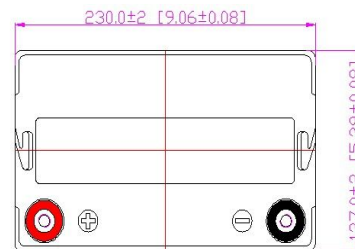
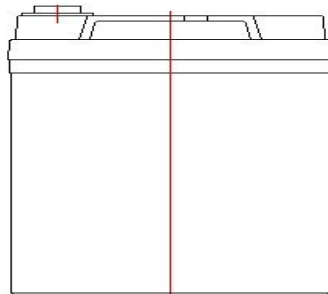
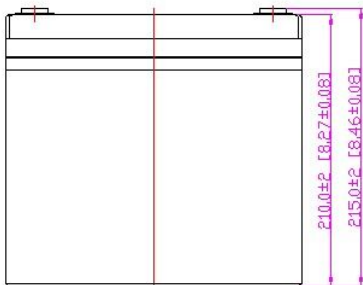
M6 Bolt & Nut

T11 Terminal



M6 Bolt

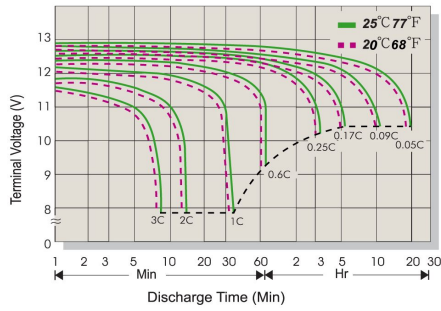
B4 Terminal



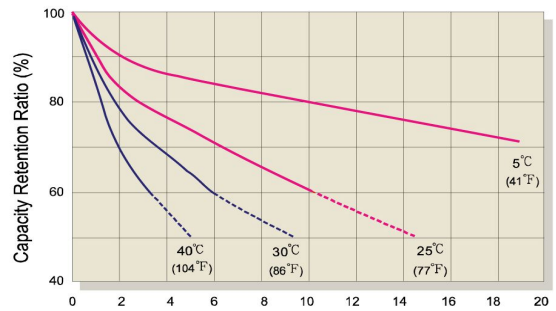
Specification:

Battery Model	MNG50-12 12V50AH			
Designed Floating Life	Up to 10 Years			
Capacity (25°C)	20HR(2.680A,10.8V)	10HR(5.000A,10.8V)	5HR(8.980A,10.5V)	1HR(27.770A,10.5V)
	53.60 AH	50.00 AH	44.90 AH	27.77 AH
Dimensions	Length	Width	Height	Total Height
	230 mm	137 mm	210 mm	215 mm
Approx. Weight	16.30 KG ± 3%			
Internal Resistance	Full charged at 25°C: ≤12.20 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	
	14.4-14.6V(-30mV/°C), max. Current:12.00A		13.5-13.8V (-20mV/°C)	

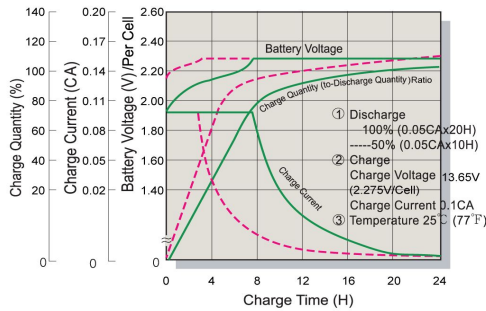
Terminal Voltage (V) and Discharge Time



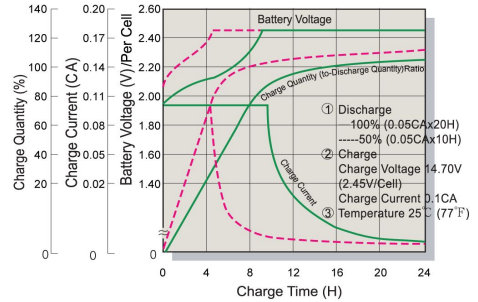
Capacity Retention Characteristic



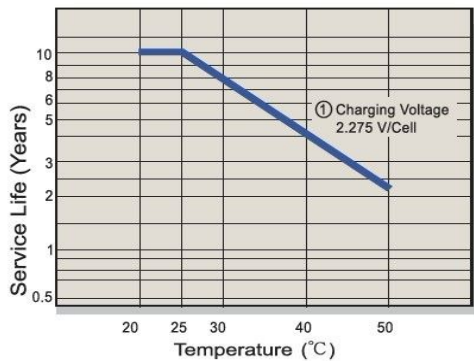
Battery Voltage and Charge Time for Standby Use



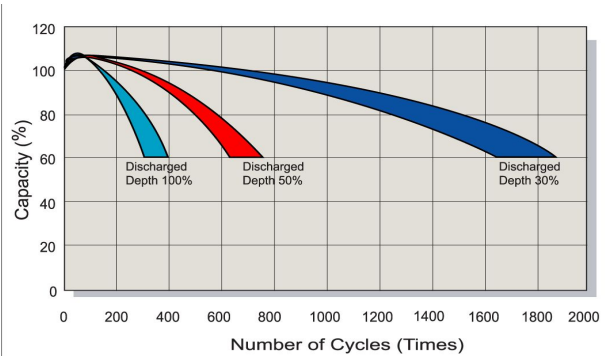
Battery Voltage and Charge Time for Cycle Use



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	158.7	107.9	73.9	44.94	27.54	17.19	13.36	10.51	8.91	5.95	5.00	2.68
1.75V/Cell	160.0	108.9	74.5	45.32	27.77	17.33	13.47	10.60	8.98	6.00	5.08	2.72
1.70V/Cell	164.0	111.6	76.4	46.46	28.47	17.76	13.81	10.86	9.21	6.15	5.15	2.76
1.67V/Cell	168.0	114.3	78.3	47.59	29.16	18.20	14.15	11.13	9.43	6.30	5.23	2.80
1.60V/Cell	175.5	119.4	81.7	49.71	30.46	19.01	14.78	11.62	9.85	6.58	5.30	2.84

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	309.4	210.5	144.1	87.6	53.7	33.51	26.05	20.49	17.37	11.60	9.75	5.23
1.75V/Cell	312.0	212.3	145.3	88.4	54.2	33.80	26.27	20.67	17.52	11.70	9.90	5.31
1.70V/Cell	319.8	217.6	149.0	90.6	55.5	34.64	26.93	21.18	17.95	12.00	10.04	5.39
1.67V/Cell	327.6	222.9	152.6	92.8	56.9	35.49	27.59	21.70	18.39	12.29	10.19	5.47
1.60V/Cell	342.2	232.8	159.4	96.9	59.4	37.07	28.82	22.66	19.21	12.84	10.34	5.54