

### MNG Series GEL Battery

#### MHB MNG Series-- Storage-type Gelled Battery

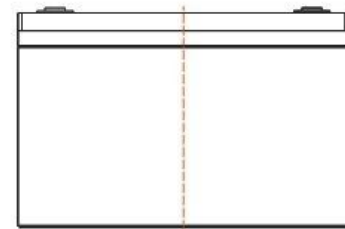
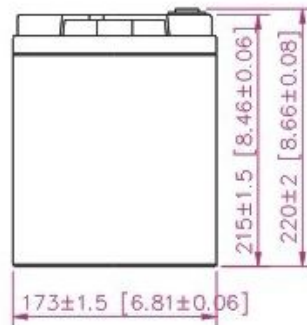
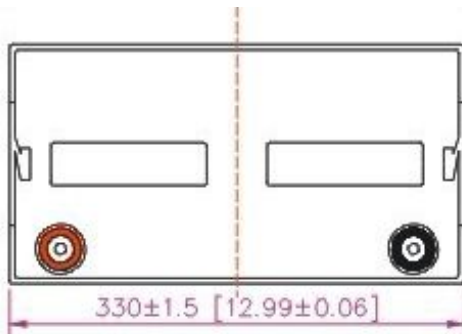
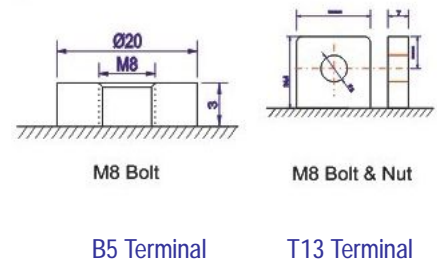
- completely sealed and maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula, Gelled electrolyte formula and updated manufacturing technique
- Floating & standby use: up to 12 years
- Cycle use 1: More than 350 cycles at 100% DOD
- Cycle use 2: More than 1800cycles at 30% DOD

#### Application:

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

#### Construction:

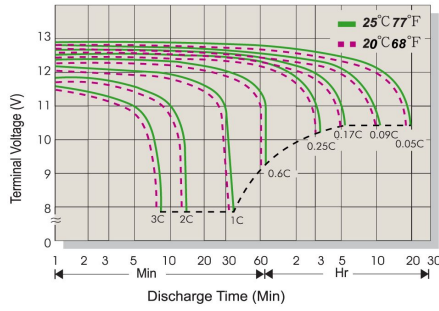
- Component .....Raw material
- Positive .....Lead dioxide
- Negative .....Lead
- Container .....ABS
- Cover .....ABS
- Sealant .....Epoxy
- Safety valve .... Rubber
- Terminal .....Copper/Pb
- Separator .....Fiber glass
- Electrolyte ..... Gelled acid



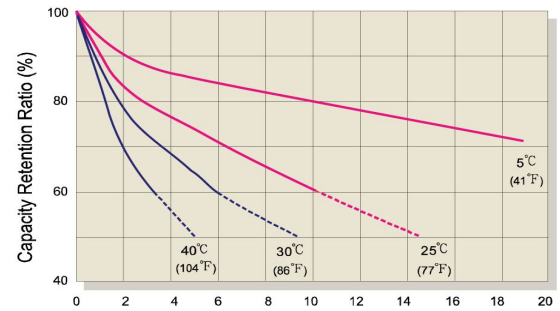
#### Speification:

Battery Model	MNG 100-12 12V100AH			
Designed Floating Life	Up to 12 Years			
Capacity (25°C)	20HR(5.0A,10.50V)	10HR(10.0A,10.50V)	5HR(16.6A,10.5V)	3HR(25.8A,10.5V)
	100AH	100AH	83.0AH	77.4AH
Dimensions	Length	Width	Height	Total Height
	330mm (12.99inch)	173mm 6.81inch)	215mm (8.46inch)	220mm (8.66inch)
Approx. Weight	30.8Kg (67.90 lbs)			
Internal Resistance	Full charged at 25°C: ≤6.5mΩ			
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%	88%	78%
Charge Voltage(25oC)	Cycle use		Float use	
	14.4-14.6V(-30mV/°C), max. Current: 1.56A		13.6-13.8V (-20mV/°C)	

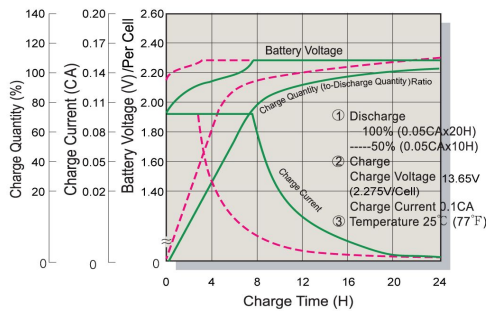
### Terminal Voltage (V) and Discharge Time



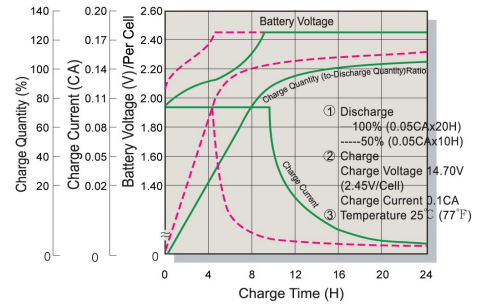
### Capacity Retention Characteristic



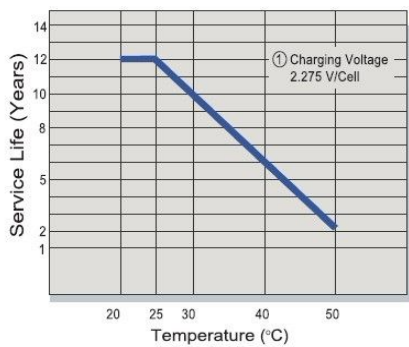
### Battery Voltage and Charge Time for Standby Use



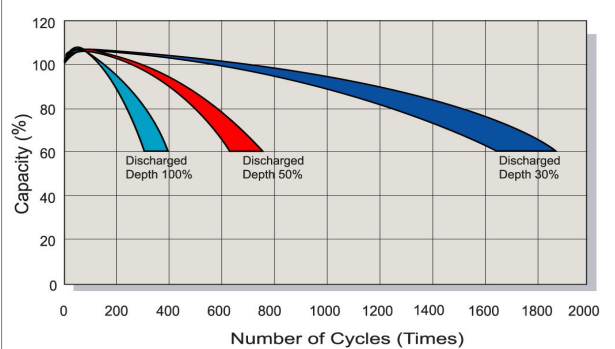
### Battery Voltage and Charge Time for Cycle Use



### 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	8Hr	10Hr	20Hr
1.85V/Cell	209.0	160.0	135.0	98.0	56.0	33.30	23.90	19.70	16.20	11.41	9.80	4.85
1.80V/Cell	259.0	205.0	164.0	105.0	58.0	34.50	25.30	20.80	16.30	11.92	10.0	5.00
1.75V/Cell	266.0	224.0	171.0	108.0	59.0	36.80	25.80	21.30	16.60	12.12	10.10	5.20
1.70V/Cell	284.0	230.0	176.0	110.0	60.0	37.10	26.30	21.30	16.60	12.20	10.20	5.30
1.60V/Cell	318.0	242.0	183.0	114.0	62.0	37.60	27.10	21.80	17.10	12.42	10.40	5.50

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

F.V/Time	5Min	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	8Hr	10Hr	20Hr
1.85V/Cell	397.1	304.0	256.5	186.2	106.4	63.3	45.4	37.4	30.8	21.7	18.6	9.2
1.80V/Cell	492.1	389.5	311.6	199.5	110.2	65.6	48.1	39.5	31.0	22.6	19.0	9.5
1.75V/Cell	505.4	425.6	324.9	205.2	112.1	69.9	50.0	40.5	31.5	23.0	19.2	9.9
1.70V/Cell	539.6	437.0	334.4	209.0	114.0	70.5	50.0	40.5	31.5	23.2	19.4	10.1
1.60V/Cell	604.2	459.8	347.7	216.6	117.8	71.4	51.5	41.4	32.5	23.6	19.8	10.5