

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

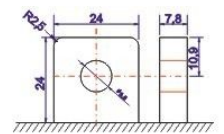
- High performance, completely maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula and updated manufacturing technique
- Floating & standby use: up to 12 years
- Cycle use 1: Up to 350 cycles at 100% DOD
- Cycle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

#### Application:

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

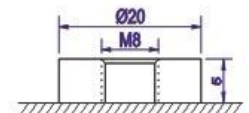
#### Construction:

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



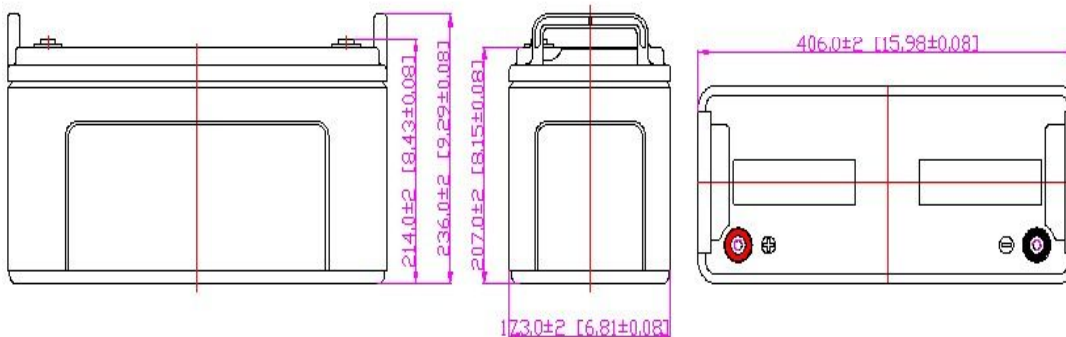
M8 Bolt

T14 Terminal



M8 Bolt

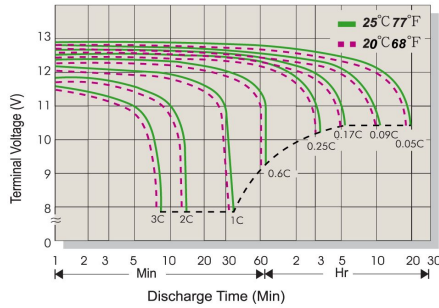
B5 Terminal



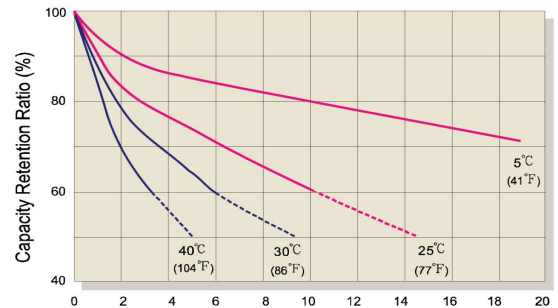
#### Specification:

Battery Model	MNG 120-12 12V120AH			
Designed Floating Life	Up to 12 Years			
Capacity (25°C)	20HR(6.02A,10.8V)	10HR(12.0A,10.8V)	5HR(19.76A,10.5V)	1HR(66.80A,10.5V)
	120.40AH	120.0AH	98.80AH	66.80AH
Dimensions	Length	Width	Height	Total Height
	406mm (15.98inch)	173mm 6.81inch)	207mm (8.15inch)	236mm (9.29inch)
Approx. Weight	35.60Kg (78.50 lbs) ±5%			
Internal Resistance	Full charged at 25°C: ≤6.0mΩ			
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(25°C)	Cycle use		Float use	
	14.4-14.6V(-30mV/°C), max. Current:36.0A		13.5-13.8V (-20mV/°C)	

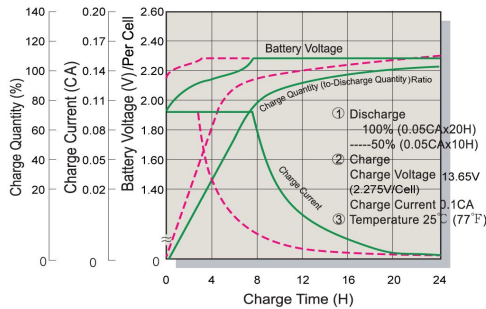
### Terminal Voltage (V) and Discharge Time



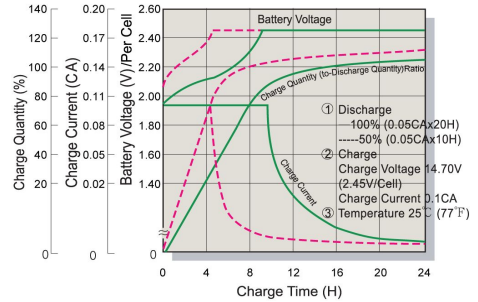
### Capacity Retention Characteristic



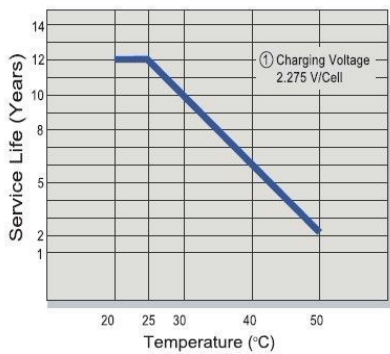
### Battery Voltage and Charge Time for Standby Use



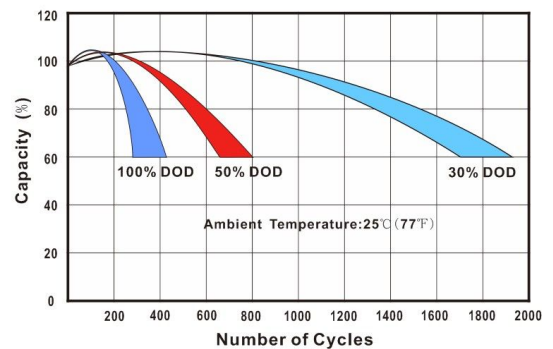
### Battery Voltage and Charge Time for Cycle Use



### 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
1.85V/Cell	271.2	199.7	173.4	104.6	61.6	36.3	27.1	22.81	18.78	17.28	11.52	5.88
1.80V/Cell	281.5	207.4	180.0	108.6	64.2	37.8	28.2	23.76	19.56	18.00	12.00	6.02
1.75V/Cell	309.7	217.7	189.0	112.9	66.8	38.9	29.0	24.00	19.76	18.18	12.12	6.06
1.70V/Cell	346.3	228.1	198.0	118.4	68.1	39.7	29.6	24.24	19.95	18.36	12.24	6.12
1.67V/Cell	382.9	238.5	207.0	121.6	70.6	40.8	30.5	24.47	20.15	18.54	12.36	6.18

### 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
1.85V/Cell	515.2	379.5	329.4	198.7	117.1	68.9	51.4	43.34	35.68	32.83	21.89	11.16
1.80V/Cell	534.9	394.0	342.0	206.3	122.0	71.8	53.6	45.14	37.16	34.20	22.80	11.40
1.75V/Cell	588.4	413.7	359.1	214.6	126.9	74.0	55.2	45.60	37.54	34.54	23.03	11.51
1.70V/Cell	657.9	433.4	376.2	224.9	129.3	75.4	56.3	46.05	37.91	34.88	23.26	11.63
1.67V/Cell	727.4	453.1	393.3	231.1	134.2	77.6	57.9	46.50	38.28	35.23	23.48	11.74