

### MNG Series GEL Battery

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

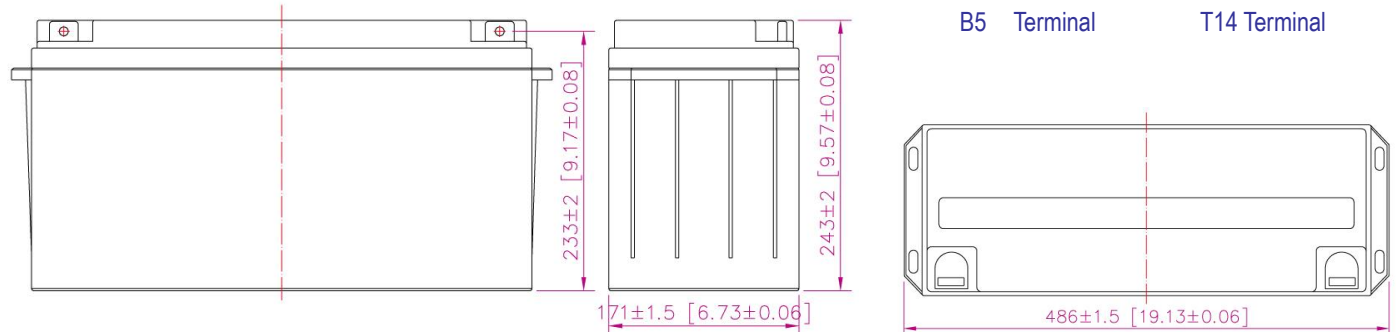
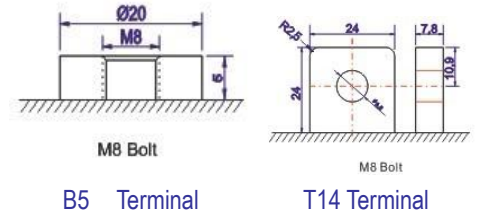
- completely sealed and maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula, Gelled electrolyte formula and updated manufacturing technique
- Floating & standby use: up to 12 years
- Cycle use 1: More than 350 cycles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

#### Application:

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

#### Construction:

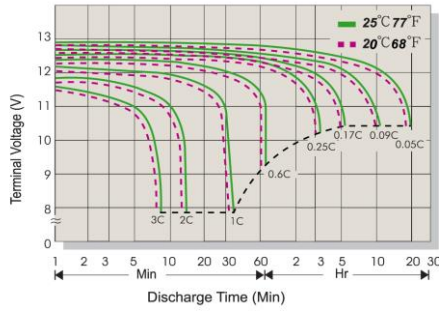
- Component .....Raw material
- Positive .....Lead dioxide
- Negative .....Lead
- Container .....ABS
- Cover .....ABS
- Sealant .....Epoxy
- Safety valve .... Rubber
- Terminal .....Copper/Pb
- Separator .....Fiber glass
- Electrolyte ..... Gelled acid



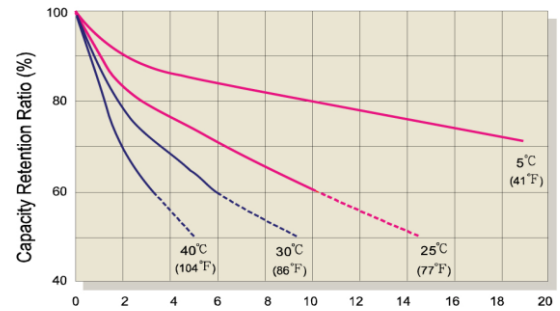
#### Speification:

Battery Model	MNG 150-12 12V150AH			
Designed Floating Life	Up to 12 Years			
Capacity (25°C)	20HR(7.50A,10.8V)	10HR(15.0A,10.8V)	5HR(24.6A,10.5V)	1HR(83.5A,10.5V)
	150.0AH	150.0AH	123.0AH	83.5AH
Dimensions	Length	Width	Height	Total Height
	486mm (19.13inch)	171mm (6.73inch)	233mm (9.17inch)	243mm (9.57inch)
Approx. Weight	42.30Kg (93.27 lbs)			
Internal Resistance	Full charged at 25°C ≤6.3mΩ			
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: 36.0A			13.6-13.8V (-20mV/°C)

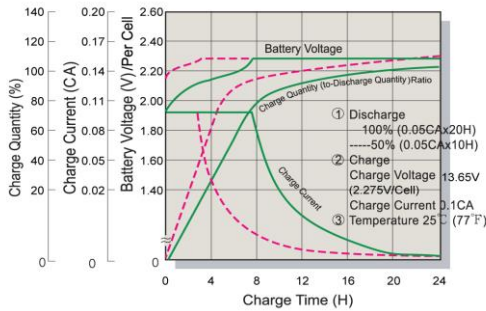
### Terminal Voltage (V) and Discharge Time



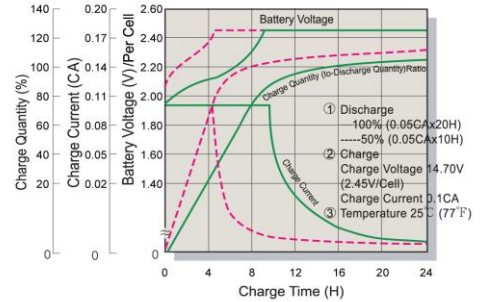
### Capacity Retention Characteristic



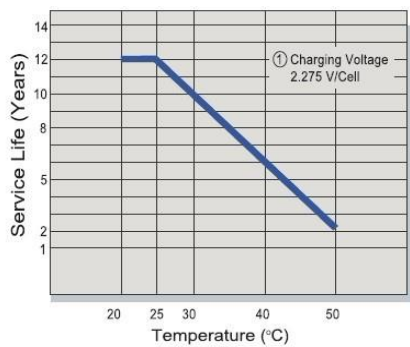
### Battery Voltage and Charge Time for Standby Use



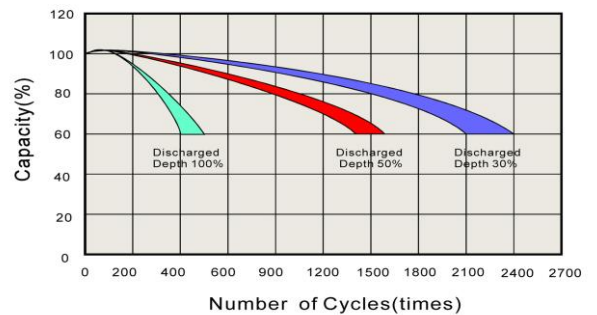
### Battery Voltage and Charge Time for Cycle Use



### 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	6Hr	10Hr	20Hr
1.85V/Cell	339.0	249.7	216.7	130.8	77.0	45.4	33.8	28.51	23.47	21.60	14.40	7.20
1.80V/Cell	351.9	259.2	225.0	135.8	80.3	47.3	35.3	29.70	24.45	22.50	15.00	7.50
1.75V/Cell	387.1	272.2	236.3	141.2	83.5	48.7	36.3	30.00	24.69	22.73	15.15	7.58
1.70V/Cell	432.8	285.1	247.5	148.0	85.1	49.6	37.0	30.29	24.94	22.95	15.30	7.65
1.67V/Cell	478.6	298.1	258.8	152.0	88.3	51.0	38.1	30.59	25.18	23.18	15.45	7.73

### 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	644.0	474.4	411.8	248.4	146.4	86.2	64.3	54.17	44.60	41.04	27.36	13.68
1.80V/Cell	668.6	492.5	427.5	257.9	152.5	89.8	67.0	56.43	46.46	42.75	28.50	14.25
1.75V/Cell	735.5	517.1	448.9	268.2	158.6	92.5	69.0	56.99	46.92	43.18	28.79	14.39
1.70V/Cell	822.4	541.7	470.3	281.1	161.6	94.3	70.3	57.56	47.38	43.61	29.07	14.54
1.67V/Cell	909.3	566.4	491.6	288.9	167.7	97.0	72.3	58.12	47.85	44.03	29.36	14.68