

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

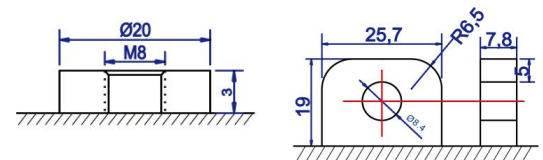
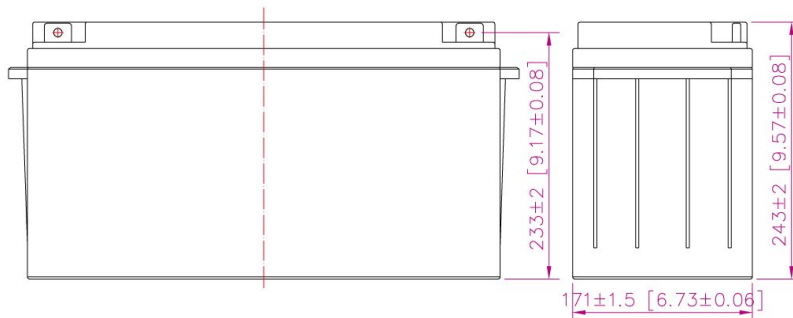
- High performance, completely maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula and updated manufacturing technique
- Floating & standby use: up to 12 years
- Cycle use 1: Up to 350 cycles at 100% DOD
- Cycle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

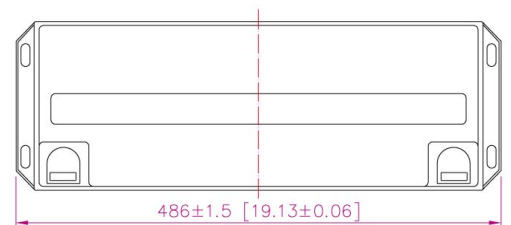


M8 Bolt

M8 Bolt

B4 Terminal

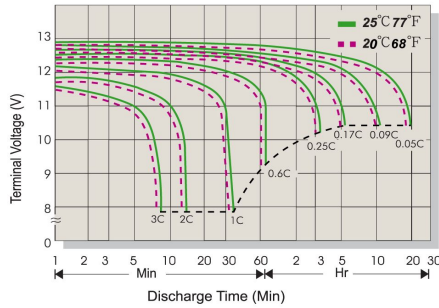
T19 Terminal



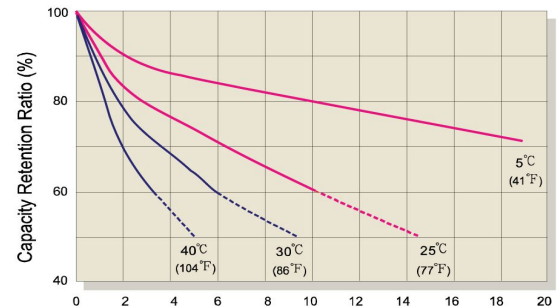
#### Specification:

Battery Model	MNG 150-12 12V150AH			
Designed Floating Life	Up to 12 Years			
Capacity (25°C)	20HR(8.25A,10.8V)	10HR(15.0A,10.8V)	5HR(24.69A,10.5V)	1HR(83.50A,10.5V)
	165AH	150.0AH	123.0AH	83.50AH
Dimensions	Length	Width	Height	Total Height
	486mm (19.13inch)	171mm (6.73inch)	233mm (9.17inch)	243mm (9.57inch)
Approx. Weight	45.50Kg (100.33lbs)±5%			
Internal Resistance	Full charged at 25°C: ≤8.5mΩ			
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%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	14.4-14.6V(-30mV/°C), max. Current:45.0A		13.6-13.8V (-20mV/°C)	

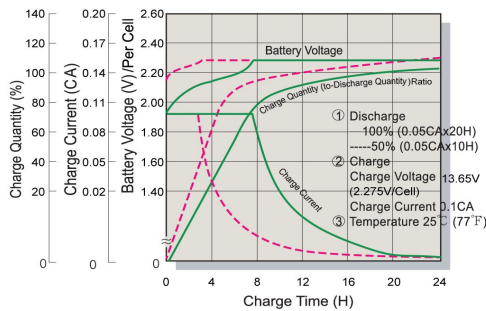
### Terminal Voltage (V) and Discharge Time



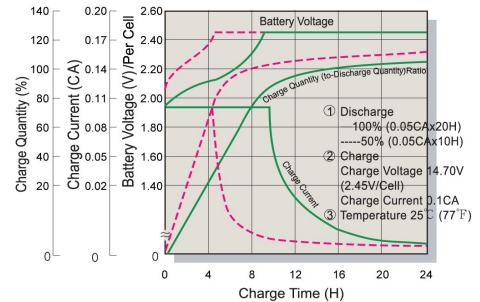
### Capacity Retention Characteristic



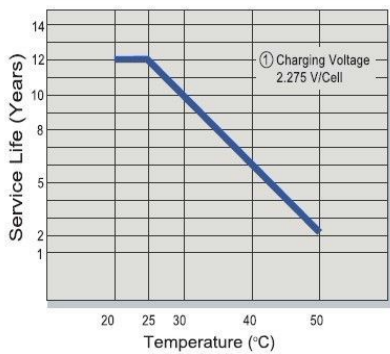
### Battery Voltage and Charge Time for Standby Use



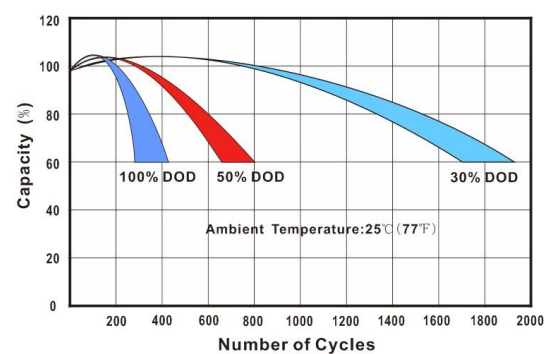
### Battery Voltage and Charge Time for Cycle Use



### 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	342.3	253.2	220.2	134.3	77.0	45.40	33.80	28.51	23.46	21.60	14.40	7.20
1.80V/Cell	394.4	262.8	228.6	139.4	80.3	47.30	35.30	29.70	24.45	22.50	15.00	8.26
1.75V/Cell	390.9	276.0	240.1	145.0	83.5	48.70	36.30	30.00	24.69	22.73	15.15	7.58
1.70V/Cell	437.0	289.0	251.5	152.0	85.1	49.60	37.00	30.29	24.93	22.95	15.30	7.65
1.67V/Cell	483.3	302.2	262.9	156.1	88.3	51.00	38.10	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	650.3	481.0	418.3	255.2	146.3	86.3	64.21	54.16	44.58	41.04	27.36	13.68
1.80V/Cell	749.3	499.3	434.3	264.9	152.6	89.9	67.07	56.43	46.45	42.75	28.50	15.69
1.75V/Cell	742.6	524.3	456.1	275.5	158.6	92.5	68.97	57.00	46.91	43.18	28.79	14.40
1.70V/Cell	830.3	549.2	477.8	288.7	161.7	94.2	70.30	57.55	47.36	43.60	29.07	14.53
1.67V/Cell	918.2	574.2	499.6	296.5	167.8	96.9	72.39	58.13	47.84	44.04	29.35	14.69