

MNG Series GEL Battery

MHB MNG Series—Storage-type Gelled Battery

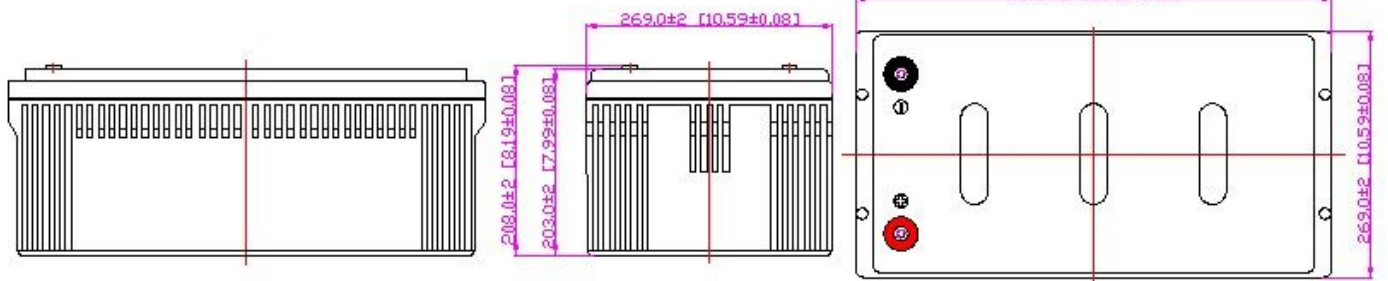
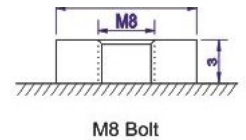
- Completely sealed and maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula, Gelled electrolyte formula and updated manufacturing technique
- Floating & standby use: up to 12 years
- Cycle use 1: Up to 350 cycles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

Application:

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

Construction:

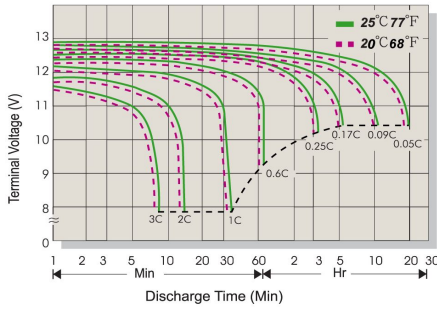
- ComponentRaw material
- SealantEpoxy
- PositiveLead dioxide
- Safety valve Rubber
- NegativeLead
- TerminalCopper/Pb
- ContainerABS
- SeparatorFiber glass
- CoverABS
- Electrolyte Sulfuric acid



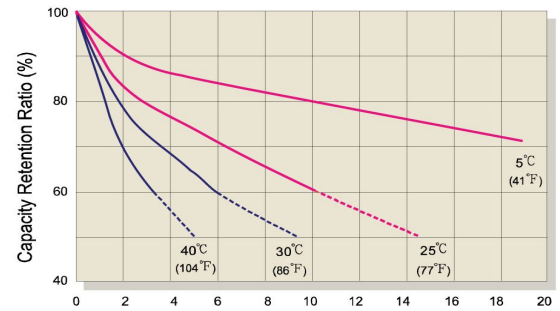
Speification:

Battery Model	MNG 230-12 12V230AH			
Designed Floating Life	Up to 12 Years			
Capacity (25°C)	20HR(11.61A,10.8V)	10HR(23.0A,10.8V)	5HR(37.86A,10.5V)	1HR(128.0A,10.5V)
	232.2AH	230.0AH	189.30AH	128.0AH
Dimensions	Length	Width	Height	Total Height
	521mm (20.51inch)	269mm (10.59inch)	203mm (7.99inch)	208mm (8.19inch)
Approx. Weight	63.20Kg (139.36lbs) ±5%			
Internal Resistance	Full charged at 25°C: ≤3.0mΩ			
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(25oC)	Cycle use		Float use	
	14.4-14.6V(-30mV/°C), max. Current:69.0A		13.6-13.8V (-20mV/°C)	

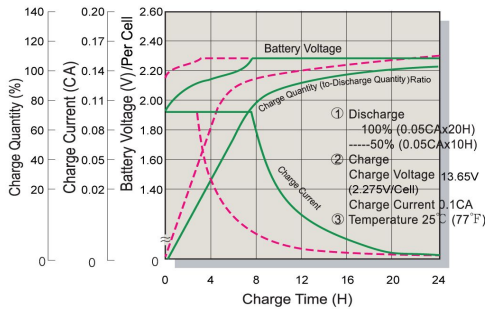
Terminal Voltage (V) and Discharge Time



Capacity Retention Characteristic



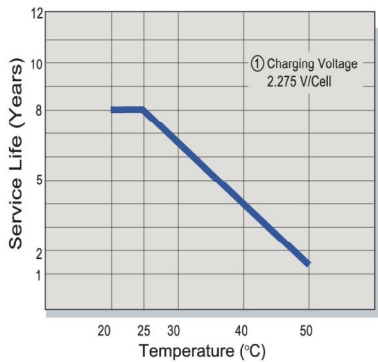
Battery Voltage and Charge Time for Standby Use



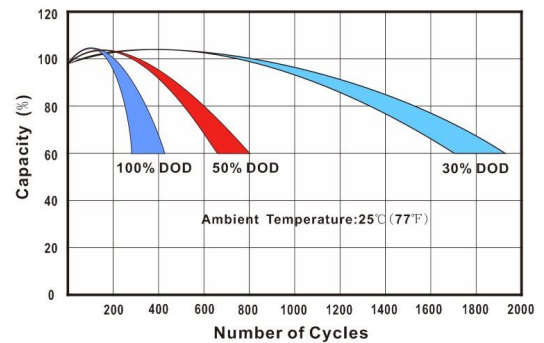
Battery Voltage and Charge Time for Cycle Use



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	519.7	382.8	332.3	200.5	118.1	69.61	51.82	43.71	35.97	33.12	22.08	11.04
1.80V/Cell	539.5	397.4	345.0	208.2	123.1	72.53	54.13	45.54	37.49	34.50	23.00	11.61
1.75V/Cell	593.5	417.3	362.3	216.5	128.0	74.67	55.66	46.00	37.86	34.85	23.23	11.62
1.70V/Cell	663.6	437.1	379.5	226.9	130.5	76.05	56.73	46.44	38.22	35.19	23.46	11.73
1.67V/Cell	733.8	457.1	396.8	233.1	135.4	78.19	58.42	46.91	38.61	35.54	23.69	11.85

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	987.5	727.4	631.3	381.0	224.3	132.3	98.46	83.05	68.35	62.93	41.95	20.98
1.80V/Cell	1025.1	755.1	655.5	395.6	233.9	137.8	102.84	86.52	71.23	65.55	43.70	22.06
1.75V/Cell	1127.7	793.0	688.4	411.3	243.2	141.9	105.75	87.39	71.93	66.22	44.14	22.08
1.70V/Cell	1260.8	830.5	721.0	431.2	247.9	144.5	107.79	88.24	72.62	66.86	44.57	22.28
1.67V/Cell	1394.3	868.4	753.9	442.8	257.2	148.6	110.99	89.13	73.35	67.53	45.01	22.52