

MAC121000 (12V100Ah)

MAC General Series Battery

MAC General Series VRLA batteries are designed with AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for common power backup system. MAC series Batteries are the general purpose batteries with 10 years floating design life at 25°C. Meet with IEC, BS, JIS and Eurobat standard

Application

- Emergency Power System
- Telecommunication systems
- Communication equipment
- Uninterruptible power supplies
- Electric bicycle and wheelchairs, etc.
- Power tools
- Marine equipment
- Alarm system
- Fire and Security System



General Features

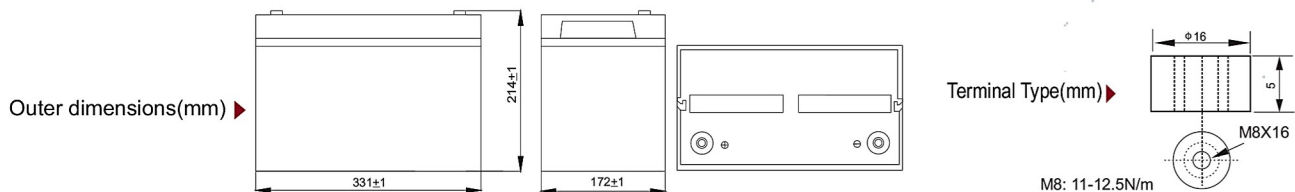
Safety Sealing
 Non-spillable construction
 High Reliability and Stability
 Sealed and Maintenance-free
 Safety and Quality certification
 Long Life and low self-discharge design

Construction

- PositiveLead dioxide
- ElectrolyteSulfuric acid
- SeparatorFiber glass
- ContainerABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- NegativeLead
- Safety ValveEPDR
- TerminalCopper

Specification

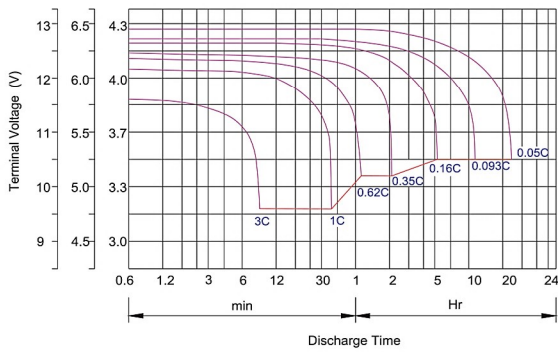
Battery Model	Nominal Voltage	12V			
	Rated capacity(10 Hour rate)	100Ah			
Dimensions	Length	Width	Height	Total Height	
	331mm (13.03 inches)	173mm(6.81 inches)	213mm(8.39 inches)	233mm (9.17inches)	
Approx Weight	32.0 kg (70.53 lbs) ±3%				
Capacity 25°C (77°F)	10 hour (10A,10.8V)	5 Hour (16A,10.5V)	3 Hour (25A,10.2V)	1 Hour (60A,9.6V)	
	100Ah	80Ah	75Ah	60Ah	
Max.discharge current	1000A(5Sec.)				
Internal Resistance	Full charged at 25 °C: Approx 4.2mΩ				
Capacity affected by Temp. (10 HR)	40°C (104 °F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)	
	102%	100%	85%	65%	
Self Discharge at 25°C (77°F)	After 3 months storage		After 6 months storage	After 12 months storage	
	91%		82%	64%	
Charge method 25°C (77°F)	Cycle Use			Float Use	
	14.10-14.40V (Initial charging current less than 40A)			13.50-13.80V	



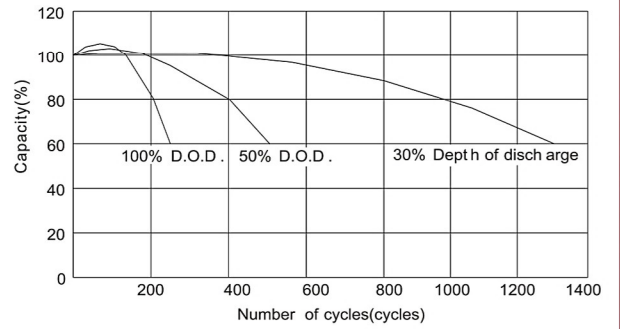
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
9.60V	A	320.3	211.0	170.1	114.0	60.0	35.0	25.7	20.0	16.5	11.7	10.5	5.7
	W	3305.5	2253.5	1823.8	1225.7	648.0	384.3	286.0	225.0	187.6	134.1	121.3	65.9
10.20V	A	310.2	190.4	160.2	109.0	56.4	33.4	25.0	19.5	16.2	11.4	10.3	5.5
	W	3312.9	2126.0	1792.6	1223.6	637.9	385.0	289.5	226.7	188.9	133.4	121.0	64.5
10.50V	A	300.1	170.3	140.1	102.0	54.6	32.6	24.4	19.2	16.0	11.3	10.1	5.5
	W	3277.1	1937.3	1598.8	1173.8	632.3	378.1	284.3	224.6	187.6	132.9	119.5	65.0
10.80V	A	289.2	160.5	130.2	94.0	52.8	31.8	23.8	18.9	15.6	11.0	10.0	5.4
	W	3244.8	1850.9	1499.9	1089.1	614.6	372.4	280.6	223.2	184.4	130.4	118.9	64.3
11.10V	A	279.5	150.4	120.2	84.0	51.0	31.0	23.0	18.4	15.2	10.7	9.5	5.1
	W	3169.5	1741.6	1399.1	982.8	599.8	366.4	273.2	219.1	181.4	128.1	114.7	61.8

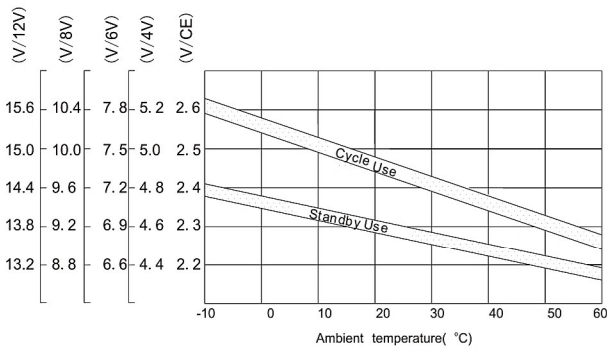
Discharge characteristic Curve



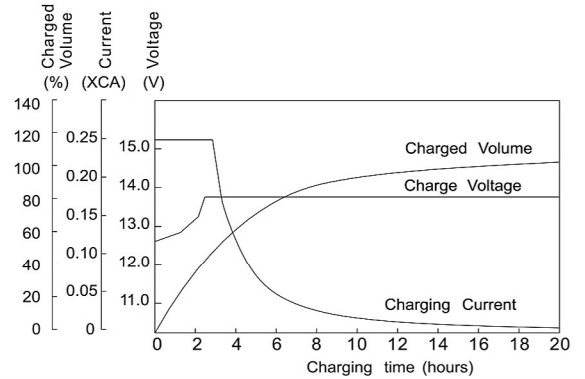
Cycle service life in relation to depth of discharge



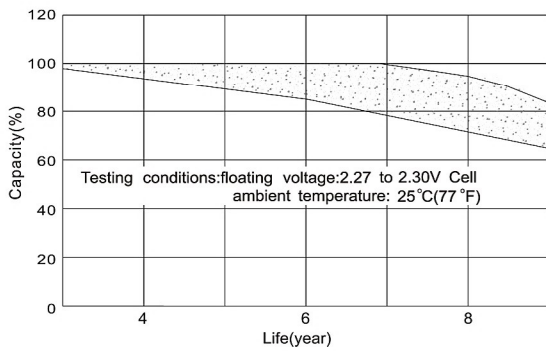
Relationship between charging voltage and temperature



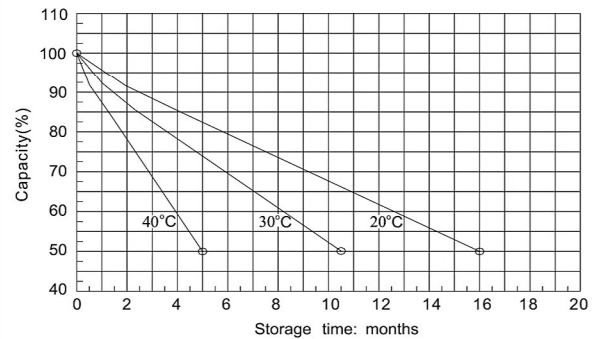
Constant voltage charging characteristic (0.25CA, at 25°C)



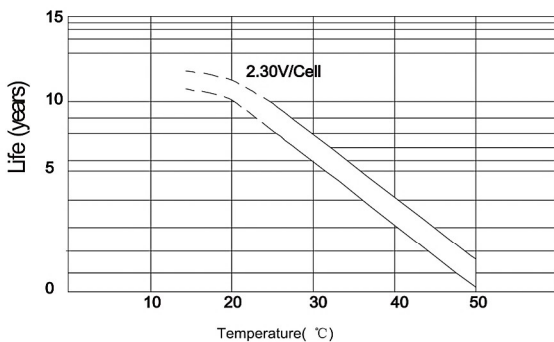
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

