

MLG12-100_(12V100AH)

Features

Maintenance-free operation
Compact design
Gelled Electrolyte Technology

Stable quality and high reliability
12 years design time (at 25°C)



Application

- Solar and wind system
- Alarm and security system
- Backup power for testing and measuring instruments
- UPS
- Emergency lighting
- Fire alarm and security systems
- Auto control system
- Electronic apparatus and equipment
- Communication power supply
- Telecommunication system
- DC power supply

Specifications

Nominal Voltage	12V (6 cells)	Operating Temp.Range	Discharge: -15 - 50°C (5 - 122°F)
Nominal Capacity	106AH (20hr, 1.80V/cell, 25°C/76°F)	Nominal Operating Temp.Range	Charge : 0 - 40°C (32 - 104°F)
	100AH (10hr, 1.80V/cell, 25°C/77°F)		Storage : -15 - 40°C (5 - 104°F)
	85AH (5hr, 1.75V/cell, 25°C/77°F)		25 ± 3°C (77 ± 5°F)
	60AH (1hr, 1.60V/cell, 25°C/77°F)		14.4~14.8V (25°C/77°F) Temp.Coefficient -30mV/°C
Dimension	Length 329±2mm	Cycle Use	Initial Charging Current Less than 30A
	Width 172±2mm	Standby Use	13.5~13.8V (25°C/77°F) Temp.Coefficient -20mV/°C
	Container Height 214±2mm		No limit on Initial Charging Current
	Total Height(with Terminal) 216±2mm		40°C (104°F) 103%
Approx Weight	Approx 31.8Kg	Capacity affected by Temperature	25°C (77°F) 100%
Terminal	T5 or F7		0°C (32°F) 86%
Container Material	ABS		Sunstone MLGseries batteries may be stored for up to 9 months at 25°C (77°F) and then a freshening charge is required.
Max. Discharge Current	1000A (5S)	Self Discharge	For higher temperatures the time interval will be shorter.
Internal Resistance	Approx 5.5mΩ		

Constant Current Discharge (Amperes at 25°C/77°F)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	\	184.4	150.4	93.7	72.5	59.6	35.2	26.4	18.2	11.0	5.78
1.75V/cell	\	202.5	163.1	97.6	75.2	61.5	36.2	27.1	18.6	11.2	5.87
1.70V/cell	\	216.3	176.1	100.9	77.6	63.3	37.2	27.7	18.9	11.3	5.92
1.65V/cell	\	230.7	186.2	106.5	80.9	65.8	38.2	28.5	19.3	11.5	6.01
1.60V/cell	\	246.5	194.7	111.2	83.9	68.0	39.3	28.9	19.7	11.6	6.07

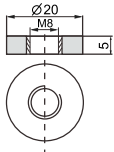
Constant Power Discharge (Watts per cell at 25°C/77°F)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	\	337.9	285.3	176.1	137.7	116.1	67.7	51.2	35.9	21.8	11.39
1.75V/cell	\	362.1	299.6	183.3	143.4	118.7	69.5	52.3	36.5	22.1	11.56
1.70V/cell	\	381.1	315.2	189.5	148.1	120.4	71.2	53.4	36.9	22.3	11.68
1.65V/cell	\	398.9	326.8	199.8	152.3	124.3	72.7	54.3	37.6	22.4	11.79
1.60V/cell	\	415.1	340.9	206.0	156.3	128.2	74.2	55.4	38.2	22.6	11.91

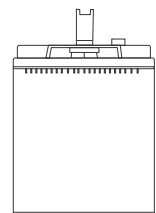
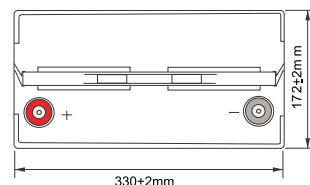
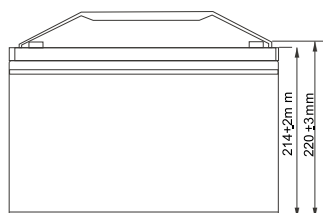
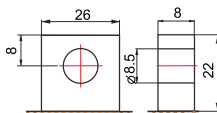
Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

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T5Terminal

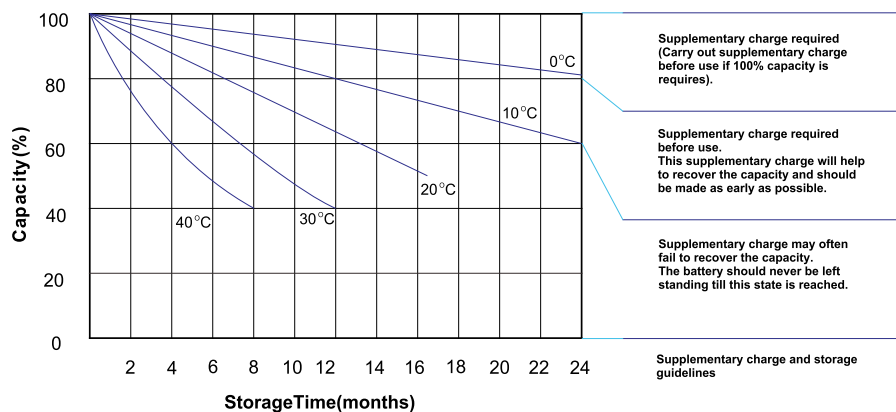


F7Terminal

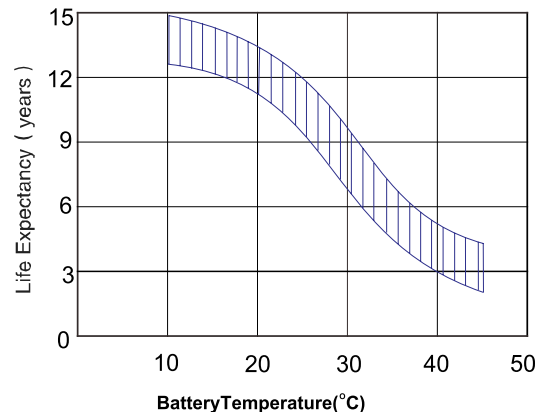


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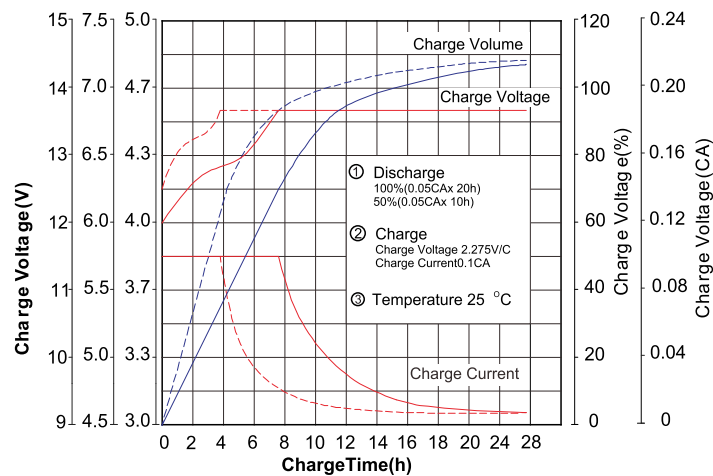
Storage characteristics



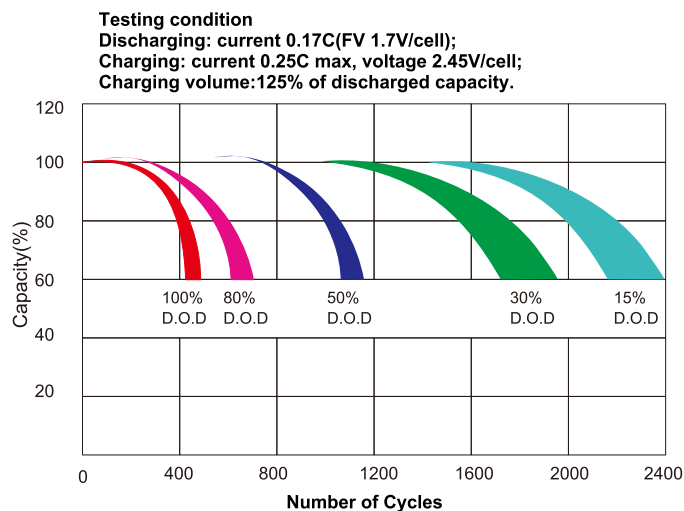
Effect of temperature on long term float life



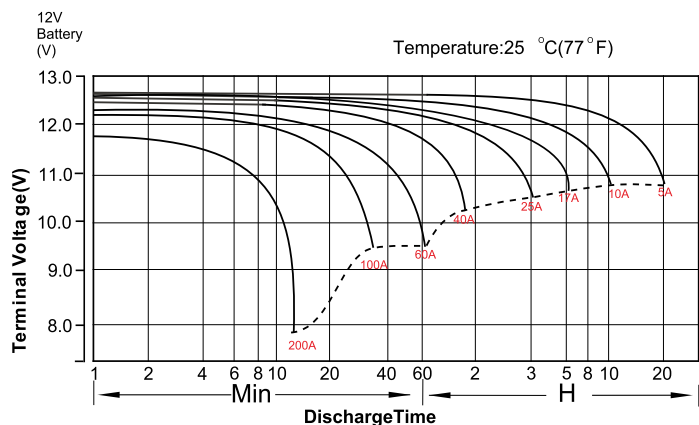
Charge characteristic Curve for standby use



Cycle Life in Relation to Depth of Discharge



Discharge characteristic Curve



Temperature Effects in Relation to Battery Capacity

