

## ML12-100 (12V100AH C10 @25°C)

### Features

- § Maintenance-free operation
- § Compact design
- § ABS case, Flame Retardant V0 is available

- § Stable quality and high reliability
- § 10 years design life (at 25°C)



### Application

- § Telecommunication system
- § Alarm and security system
- § Backup power

- § UPS
- § Emergency lighting
- § Auto control system

- § Electronic apparatus and equipment
- § Communication power supply
- § DC power supply

### Specification

Nominal Voltage	12V (6 cells)	Operating Temp.Range	Discharge: -15-50°C ( 5-122°F )
Nominal Capacity	106AH (20hr, 1.80V/cell, 25°C/77°F)		Charge:0-40°C (32-104°F)
	100AH (10hr, 1.80V/cell, 25°C/77°F)	Nominal Operating Temp.Range	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)	Cycle Use	14.4~14.8V (25°C/77°F) Temp.Coefficient -30mV/°C
Dimension	Length 329 ± 2mm	Standby Use	Initial Charging Current Less than 30A
	Width 172 ± 2mm		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) 220 ± 2mm	Capacity affected by Temperature	40°C (104°F) 103%
Approx Weight	Approx 29.5Kg		25°C (77°F) 100%
Terminal	T5 or F7		0°C (32°F) 86%
Container Material	ABS	Self Discharge	ML series batteries may be stored for up to 6 months
Max. Discharge Current	1000A (5S)		at 25°C (77°F) and then a freshening charge is required.
Internal Resistance	Approx 5.0mΩ		For higher temperatures the time interval will be shorter.

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

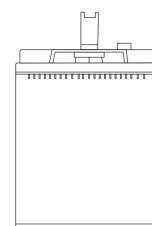
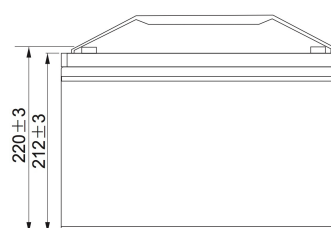
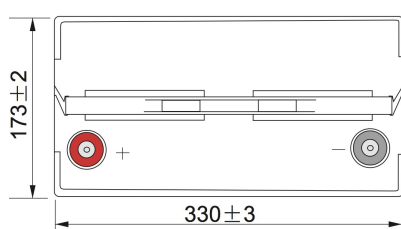
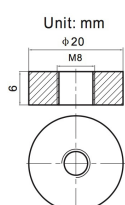
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	240.1	174.2	142.1	90.3	69.2	56.9	33.6	25.2	17.3	10.2	5.43
1.75V/cell	270.2	191.3	154.1	94.1	71.8	58.7	34.5	25.8	17.7	10.4	5.53
1.70V/cell	292.2	204.4	166.4	97.3	74.1	60.4	35.5	26.4	18.0	10.6	5.58
1.65V/cell	315.0	218.0	175.9	101.6	77.2	62.8	36.5	27.2	18.4	10.7	5.66
1.60V/cell	336.7	232.9	183.9	106.2	80.0	64.9	37.5	27.6	18.7	10.8	5.71

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

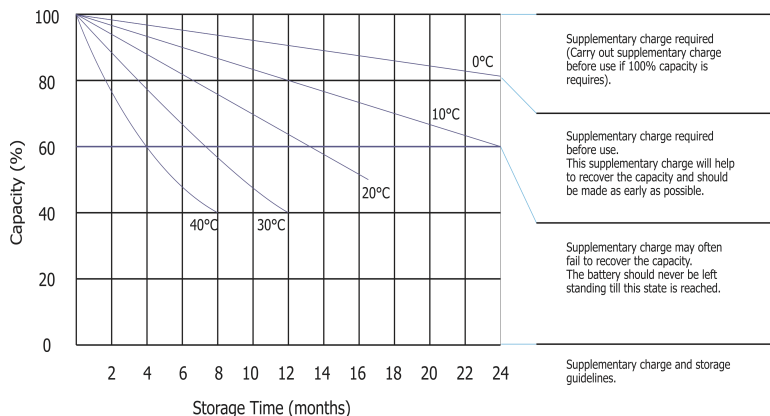
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	444.9	325.7	275.1	171.5	132.8	111.9	65.3	49.4	34.5	20.4	10.93
1.75V/cell	490.5	349.1	288.9	178.5	138.3	114.4	67.1	50.4	35.2	20.6	11.02
1.70V/cell	511.3	367.4	303.9	184.5	142.7	116.0	68.6	51.4	35.6	20.8	11.11
1.65V/cell	535.3	384.5	315.1	192.7	146.9	119.9	70.1	52.4	35.8	21.0	11.24
1.60V/cell	558.3	400.2	328.7	198.6	150.7	123.6	71.5	53.4	36.3	21.2	11.45

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

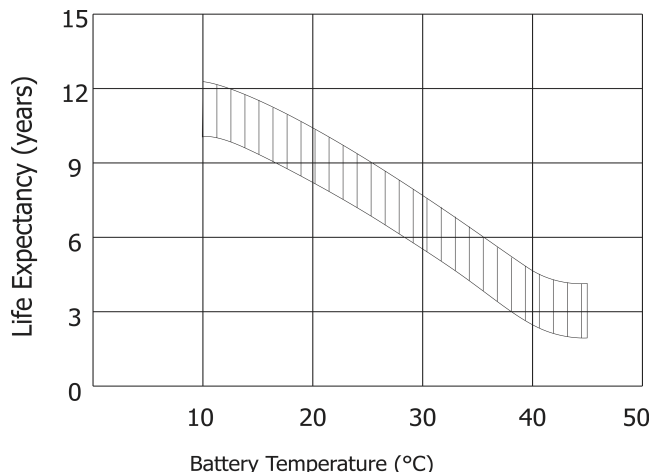
### Dimension



## Storage Characteristics



## Effect Of Temperature On Float Life



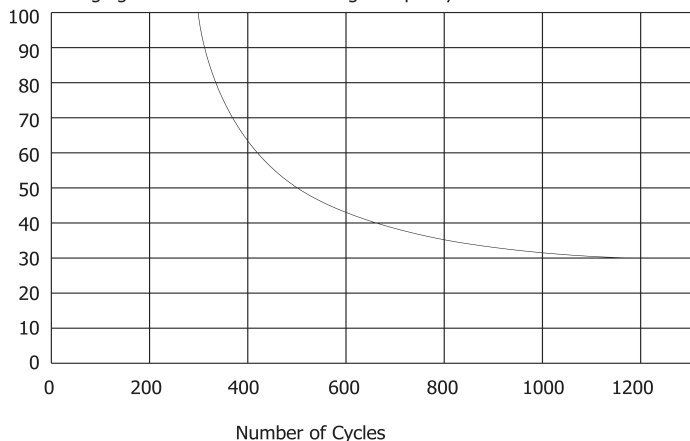
## Cycle Life With Depth Of Discharge (D.O.D.)

Testing condition

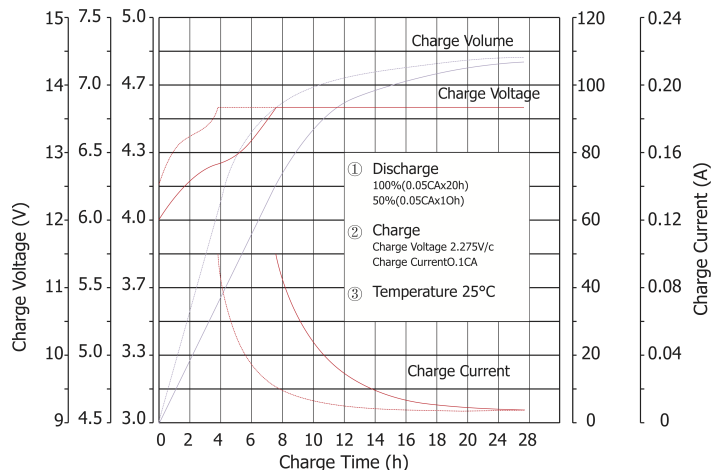
Discharging: current 0.17C (FV 1.7V/cell);

Charging: current 0.25C max, voltage 2.45V/cell;

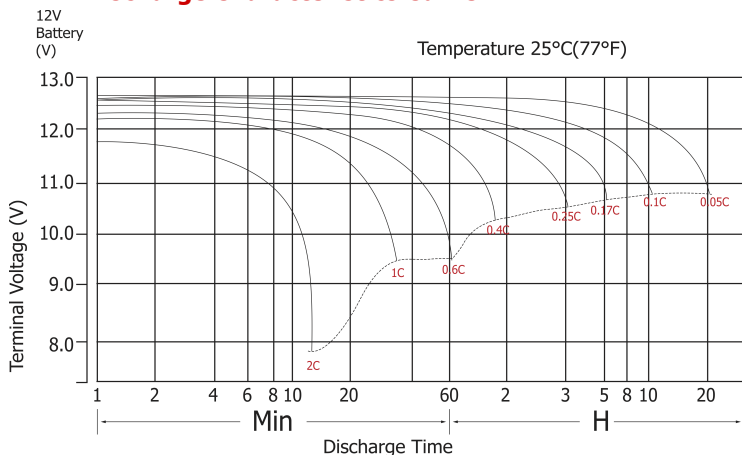
Charging volume: 125% of discharged capacity



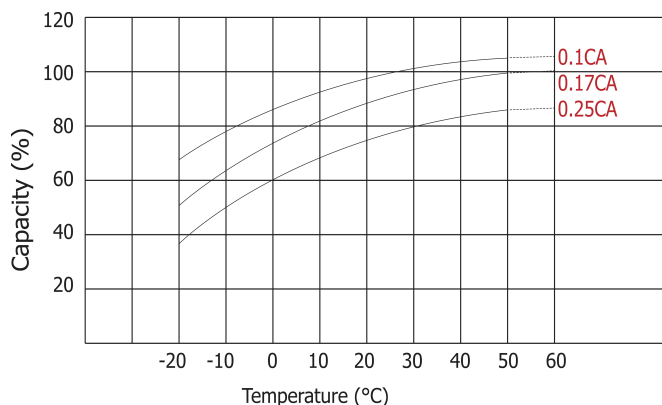
## Charge Characteristics Curve For Standby Use



## Discharge Characteristics Curve



## Temperature Effects With Capacity



## Certificates

