



# General Purpose MA12-120 (12V120AH)

## Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	120.0AH	
Dimension	Length	410 ± 3mm (16.14 inches)
	Width	177 ± 2mm (6.97 inches)
	Container Height	225 ± 2mm (8.86 inches)
	Total Height (with Terminal)	225 ± 2mm (8.86 inches)
Approx Weight	Approx 35.0 kg (77.2lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	124.8 AH/6.24A	(20hr, 1.80V/cell, 25 °C/77 °F)
	120.0 AH/12.0A	(10hr, 1.80V/cell, 25 °C/77 °F)
	104.5 AH/20.9A	(5hr, 1.75V/cell, 25 °C/77 °F)
	92.1 AH/30.7A	(3hr, 1.75V/cell, 25 °C/77 °F)
	78.1 AH/78.1A	(1hr, 1.60V/cell, 25 °C/77 °F)
Max. Discharge Current	1300A (5s)	
Internal Resistance	Approx 4.0m Ω	
Operating Temp. Range	Discharge :	-15 ~ 50°C (5 ~ 122°F)
	Charge :	0 ~ 40°C (32 ~ 104°F)
	Storage :	-15 ~ 40°C (5 ~ 104°F)
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Initial Charging Current less than 36.0A. Voltage	
	14.4V~15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Leoch LP series batteries may be stored for up to 6 months at 25°C (77°F) and then a refreshing charge is required. For higher temperatures the time interval will be shorter.	



## Applications

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	250.6	193.7	163.7	140.4	104.2	75.8	60.1	36.5	28.0	23.0	19.5	17.0	13.7	11.5	6.15
1.80V/cell	295.2	216.0	181.0	151.9	111.1	81.0	64.4	39.3	30.0	24.3	20.5	17.8	14.3	12.0	6.24
1.75V/cell	334.1	236.9	194.4	161.6	117.6	85.3	68.0	40.8	30.7	24.8	20.9	18.1	14.5	12.1	6.35
1.70V/cell	381.6	257.8	209.3	172.1	123.6	89.6	71.5	42.4	31.7	25.4	21.3	18.4	14.7	12.2	6.41
1.65V/cell	427.7	278.6	222.7	181.8	130.1	93.9	74.9	43.6	32.5	26.1	21.7	18.8	14.9	12.4	6.47
1.60V/cell	486.7	305.3	236.6	191.9	137.3	98.2	78.1	45.2	33.3	26.6	22.2	19.1	15.1	12.5	6.54

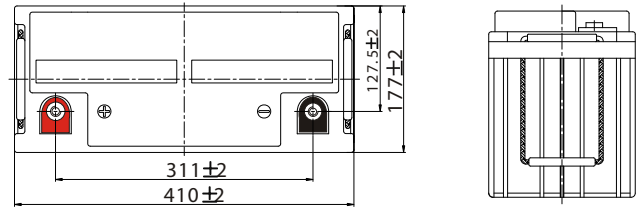
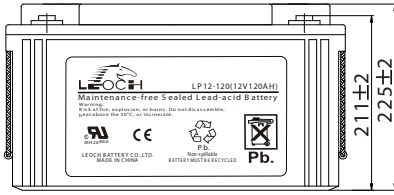
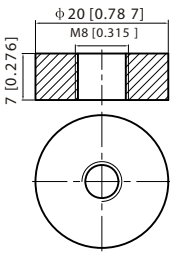
## Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	458.1	357.8	305.4	264.7	198.5	145.8	116.0	71.0	54.7	45.1	38.3	33.4	27.0	22.8	12.2
1.80V/cell	534.0	394.3	333.1	282.2	208.6	154.4	123.6	75.9	58.2	47.3	39.9	34.9	28.1	23.7	12.3
1.75V/cell	591.5	425.5	353.5	297.3	218.9	161.1	129.9	78.4	59.2	48.1	40.7	35.4	28.4	23.9	12.5
1.70V/cell	656.8	452.5	375.2	314.2	228.8	168.6	136.2	81.3	61.1	49.2	41.4	35.9	28.8	24.1	12.7
1.65V/cell	725.7	484.7	396.3	329.4	238.8	175.2	141.5	83.1	62.4	50.2	42.1	36.5	29.2	24.4	12.8
1.60V/cell	806.8	518.9	414.1	343.9	250.3	182.2	146.9	85.8	63.6	51.2	42.7	37.0	29.5	24.6	12.9

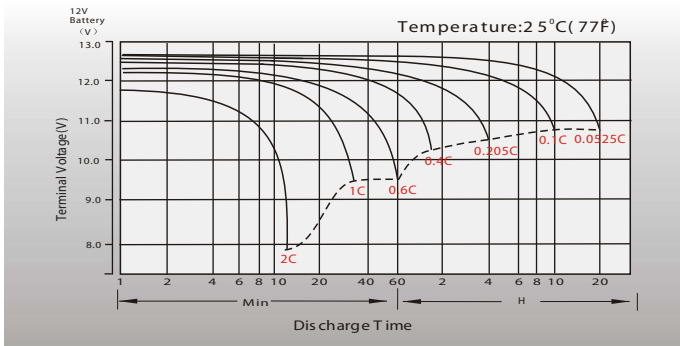
# Dimensions

## T11 Terminal

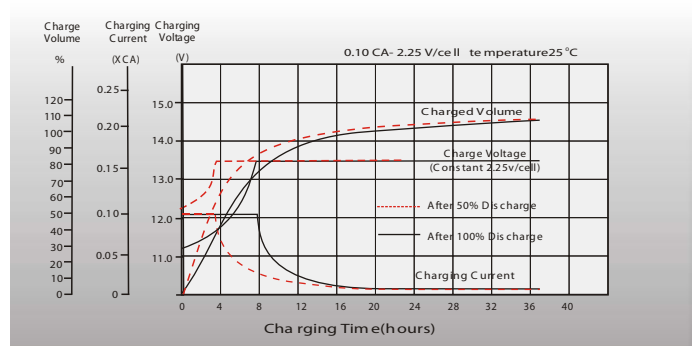
Unit: mm [inches]



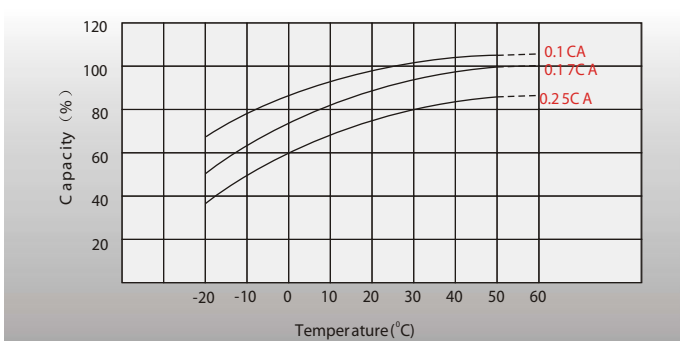
## Discharge Characteristics



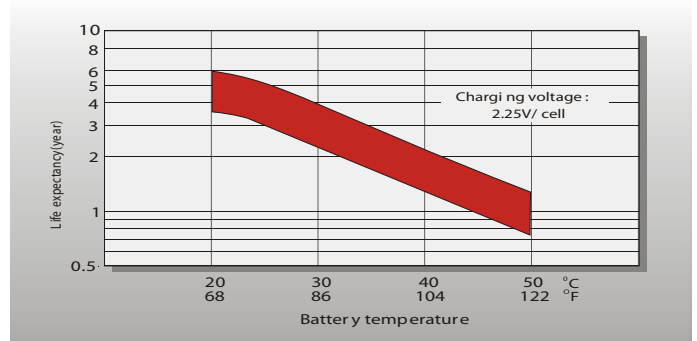
## Float Charging Characteristics



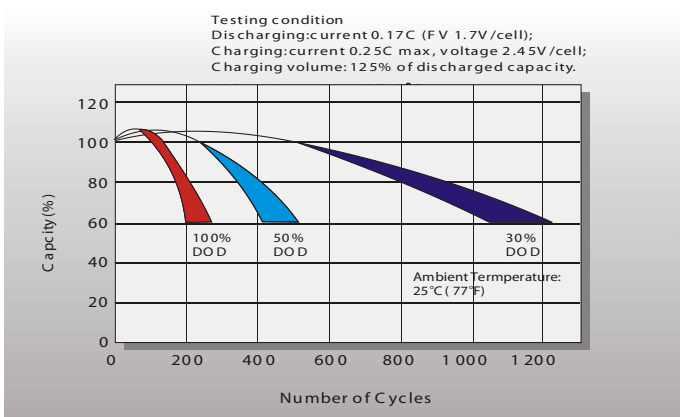
## Temperature Effects in Relation to Battery Capacity



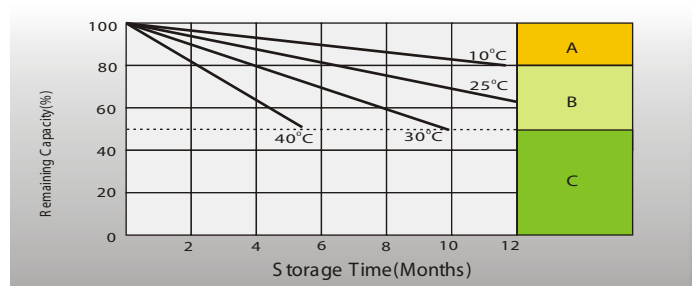
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics



- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required)
- B** Supplementary charge required before use. Optional charging ways as below:
  - Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
  - Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
  - Charged for 8~10 hours at limited current 0.05 CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.

## Sales Office

Importado Por: COÉXITO S.A.  
 Carrera. 5 No. 61A - 95 / Cali - Colombia  
 Línea nacional de atención al cliente: 01 8000 510606  
 www.coexito.com.co

