



# AC SERIES -Deep Cycle

## AC12-26 (12V26AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	26.0AH	
Dimension	Length	166.5±1mm (6.56 inches)
	Width	175±1mm (6.89 inches)
	Container Height	125±1mm (4.92 inches)
	Total Height (with Terminal)	125±1mm (4.92 inches)
	Approx Weight	Approx 9.35 Kg (20.6 lbs)
Terminal	T3	
Container Material	ABS	
Rated Capacity	27.8AH/1.39A	(20hr, 1.80V/cell, 25°C/77°F)
	26.0AH/2.60A	(10hr, 1.80V/cell, 25°C/77°F)
	22.8AH/4.56A	(5hr, 1.75V/cell, 25°C/77°F)
	20.7AH/6.89A	(3hr, 1.75V/cell, 25°C/77°F)
	16.8AH/16.8A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	390A (5s)	
Internal Resistance	Approx 13.0mΩ	
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 7.8A. 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	Synergy AC series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Applications

- ◆ Electric tools
- ◆ Vehicle in place of walking
- ◆ Lawn mowers
- ◆ Golf trolleys and golf cart
- ◆ Portable apparatus, lights and instruments;
- ◆ Electric toys
- ◆ Illumination light
- ◆ Fire alarms
- ◆ Portable power
- ◆ Wheelchairs
- ◆ Medical equipments.



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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	38.1	32.0	28.0	20.1	16.0	13.0	8.06	6.29	5.09	4.14	3.61	2.95	2.45	1.38
1.80V/cell	48.6	38.7	33.1	23.8	18.6	14.5	8.80	6.77	5.44	4.44	3.87	3.13	2.60	1.39
1.75V/cell	53.4	42.3	35.6	24.7	19.3	15.2	9.13	6.89	5.56	4.56	3.98	3.18	2.63	1.41
1.70V/cell	58.3	45.1	37.4	25.7	20.1	15.7	9.49	7.08	5.71	4.67	4.06	3.22	2.65	1.43
1.65V/cell	62.9	48.0	39.7	27.1	20.6	16.2	9.76	7.38	5.90	4.80	4.15	3.27	2.71	1.45
1.60V/cell	68.3	51.3	42.3	28.6	21.5	16.8	10.1	7.61	6.09	4.96	4.24	3.31	2.74	1.46

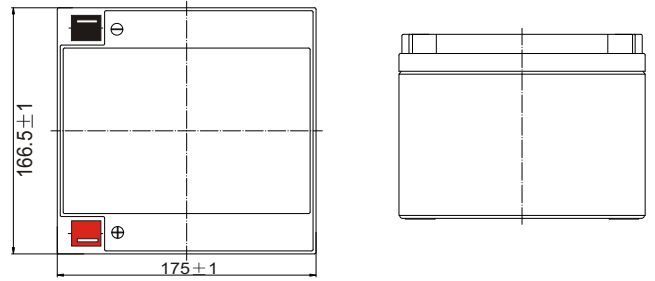
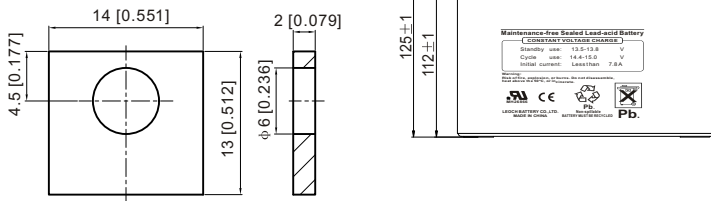
### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	71.0	60.4	53.3	38.7	30.9	25.2	15.7	12.3	9.97	8.13	7.13	5.83	4.86	2.76
1.80V/cell	89.5	71.9	62.1	45.1	35.7	28.1	17.0	13.2	10.6	8.70	7.62	6.17	5.15	2.78
1.75V/cell	97.2	77.8	66.2	46.6	36.9	29.2	17.6	13.4	10.8	8.91	7.82	6.28	5.19	2.81
1.70V/cell	104.4	82.4	69.2	48.3	38.2	30.1	18.3	13.7	11.1	9.12	7.97	6.36	5.24	2.86
1.65V/cell	111.9	87.1	73.2	50.7	39.0	31.0	18.7	14.2	11.4	9.36	8.13	6.45	5.34	2.89
1.60V/cell	119.4	92.0	77.2	53.0	40.3	31.8	19.3	14.6	11.7	9.62	8.29	6.51	5.40	2.90

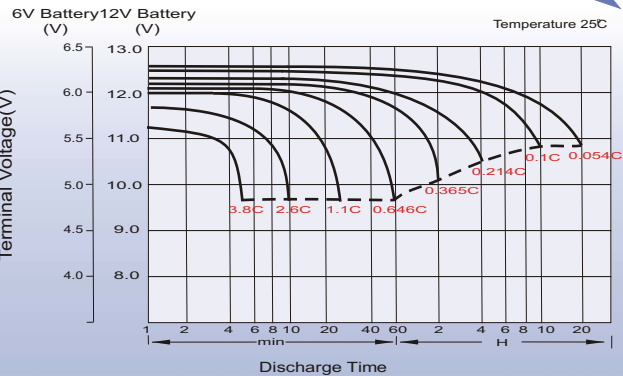
## Dimensions

### T3 Terminal

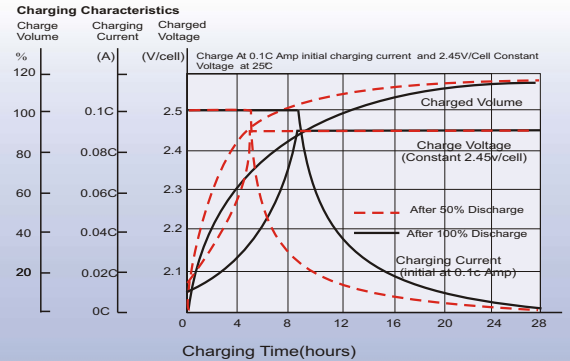
Unit: mm [inches]



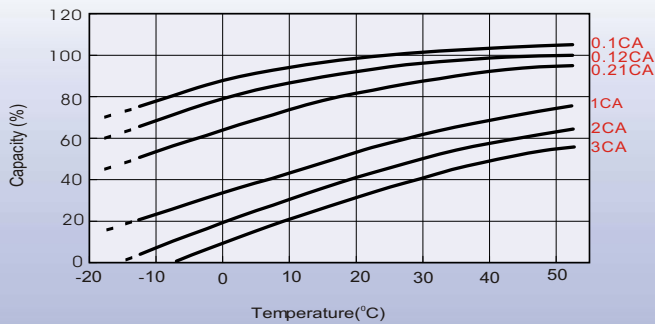
## Discharge Characteristics



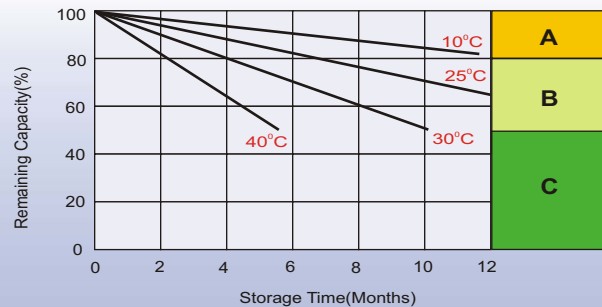
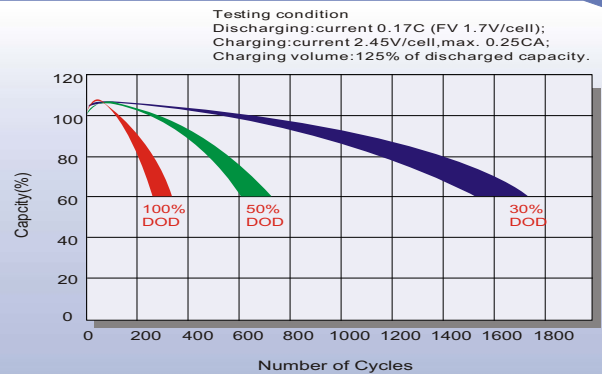
## Charging Characteristics (cycle use)



## Temperature Effects in Relation to Battery Capacity



## 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 way as below:
  1. Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
  2. Charged for above 20 hours at limited current 0.25CA and constant volatge 2.45V/cell.
  3. Charged for 8-10 hours at limited current 0.05CA .
- C** Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.

## Sales Office

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