

# Thin Plate Pure Lead

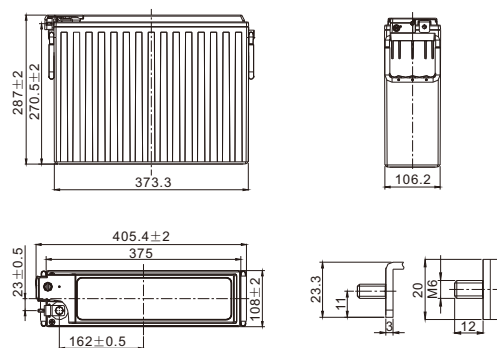


## PLH90FT (12V90Ah)

**PLH SERIES**  
**LONG STANDBY LIFE**

### Specification

Nominal Voltage	12V	
Rated Capacity (Ah)	90Ah	(C <sub>10</sub> , 1.80V/cell, 25°C)
	90Ah	(C <sub>8</sub> , 1.75V/cell, 25°C)
Dimension	Length	405.4±2mm (15.96 inches)
	Width	108±2mm ( 4.25 inches)
	Height	287±2mm (11.29 inches)
	Total Height (with Terminal)	287±2mm (11.29 inches)
Weight	28.7Kg (63.27 lbs)	
Terminal	Threaded M8 (T11) insert with M6 front terminal adaptor	
Container Material	PC-ABS flame retardant jar and cover to UL94V-0	
Max. Discharge Current	1080A (5s)	
Internal Resistance	Approx 4.6mΩ(Fully charged)	
Operating Temp.Range	Discharge : -40°C ~ 65°C (-40°F ~ 149°F)	
	Charge : 0°C ~ 40°C (32°F ~ 104°F)	
	Storage : -20°C ~ 40°C(-4°F ~ 104°F)	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Storage	<p>PLH series batteries can be stored up to 24 months at 25°C(77°F), For higher temperatures the time interval will be shorter.</p> <p>Battery needs to be given a freshening charge when the OCV approach 2.10V/cell or when the maximum storage time is reached, whichever occurs first.</p>	



Unit: mm



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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	174.2	145.4	124.6	99.2	74.3	54.7	35.3	25.1	20.1	16.2	10.7	8.92	4.61
1.80V/cell	195.8	162.6	134.8	104.0	78.6	57.0	36.6	26.1	20.3	16.4	11.0	9.00	4.72
1.75V/cell	213.0	171.4	144.2	110.8	82.2	59.1	37.7	26.8	20.9	16.6	11.3	9.18	4.77
1.70V/cell	227.4	181.3	151.8	115.2	85.1	60.6	38.4	27.2	21.2	16.7	11.3	9.36	4.84
1.67V/cell	242.4	188.6	155.6	119.3	86.4	62.3	38.9	27.8	21.3	17.2	11.5	9.72	4.88
1.60V/cell	256.0	197.4	161.6	120.4	88.1	63.4	39.2	28.1	21.5	17.5	11.7	9.90	4.96

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	330.8	274.2	238.7	195.4	144.5	108.8	68.2	48.5	40.9	33.6	22.2	18.0	9.40
1.80V/cell	367.4	303.3	254.4	204.9	150.2	113.0	71.0	51.6	42.3	34.6	22.7	18.3	9.61
1.75V/cell	394.1	316.7	263.8	209.2	152.7	114.6	72.7	52.7	43.1	34.9	23.3	18.4	9.70
1.70V/cell	419.8	330.8	274.2	215.3	155.6	115.9	73.7	53.3	43.6	35.4	23.5	18.5	9.78
1.67V/cell	432.3	346.2	284.4	218.8	160.0	120.8	75.3	54.8	44.4	35.8	23.9	19.2	9.85
1.60V/cell	453.7	354.3	291.7	223.4	163.2	122.4	76.9	55.4	45.0	36.3	24.1	19.3	9.94

Specifications subject to change without notice.

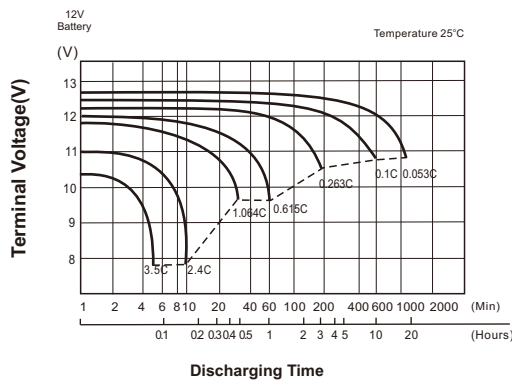
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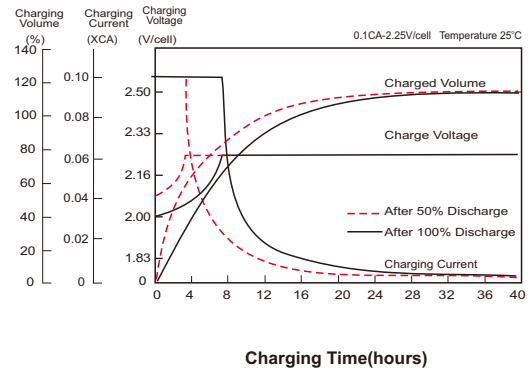
## Features & Benefits

- 20 years design life(25°C)
- Low internal resistance
- Fast Charging Acceptance
- Premium ABS+ jar & covers
- IATA Approved for Air Freight
- Heat sealed plastic container
- UL Recognized, IEC Certified
- Automated COS & TTP welding
- M6 & M8 Terminal adapter options
- Flame Retardant to UL94V-0
- Long Shelf Life up to 2 years @25°C(77°F)
- High-rate performance, high energy density
- Virgin pure lead plates / copper alloy terminal inserts
- Excellent high rate discharge capability for emergency backup power supply.
- High quality AGM separators minimize electrical resistance to allow high current discharging properties.
- Outstanding high rate charge capability with Thin Plate Pure Lead technology

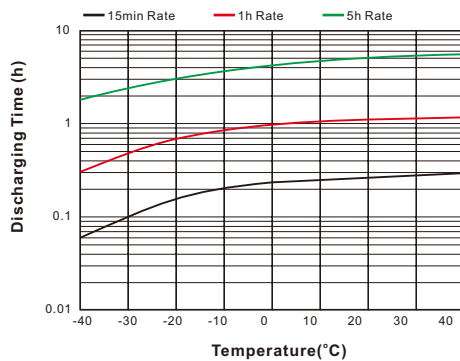
## Discharging Characteristics



## Charging Characteristics



## Effect of Temperature on Discharging Time



## Float Life

