

# Thin Plate Pure Lead

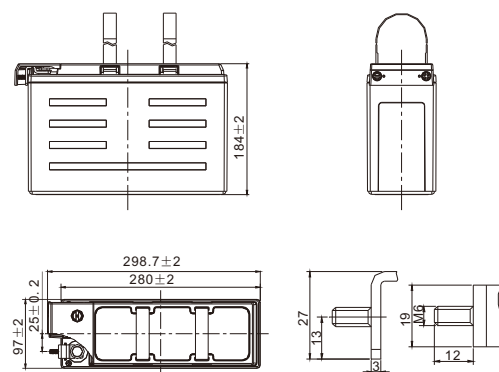


## PLH40FT (12V40Ah)

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

### Specification

Nominal Voltage	12V	
Rated Capacity (Ah)	38Ah	(C <sub>10</sub> , 1.80V/cell, 25°C)
	38Ah	(C <sub>8</sub> , 1.75V/cell, 25°C)
Dimension	Length	298.7±2mm (11.76 inches)
	Width	97±2mm ( 3.82 inches)
	Height	184±2mm (7.24 inches)
	Total Height (with Terminal)	184±2mm (7.24 inches)
Weight	12.5Kg (27.5 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	456A (5s)	
Internal Resistance	Approx 4.9mΩ(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	77.7	64.2	55.1	42.7	31.7	24.7	15.9	11.1	8.70	6.63	4.57	3.72	2.08
1.80V/cell	86.7	70.5	59.0	44.8	32.9	25.6	16.1	11.2	8.76	6.80	4.66	3.80	2.12
1.75V/cell	91.9	73.7	61.6	46.2	33.8	26.3	16.2	11.3	8.79	6.96	4.75	3.86	2.15
1.70V/cell	96.7	76.8	63.5	47.5	34.5	26.8	16.4	11.4	8.83	7.09	4.80	3.86	2.17
1.67V/cell	104.9	81.6	66.5	48.8	35.1	27.2	16.5	11.5	8.85	7.20	4.86	3.94	2.18
1.60V/cell	110.6	85.1	69.0	50.2	35.7	27.7	16.6	11.6	8.89	7.31	4.93	3.97	2.26

### 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	147.3	122.7	106.0	83.2	62.7	48.9	31.6	22.4	17.4	13.4	9.70	8.00	4.20
1.80V/cell	161.7	133.0	112.5	86.6	64.6	50.5	31.9	22.5	17.5	13.7	9.90	8.10	4.30
1.75V/cell	169.8	137.8	116.3	88.6	65.9	51.5	32.1	22.6	17.5	13.9	10.1	8.20	4.40
1.70V/cell	176.1	141.9	118.7	90.5	66.9	52.2	32.4	22.7	17.6	14.2	10.1	8.30	4.40
1.67V/cell	189.0	149.3	123.4	92.4	67.7	52.8	32.5	22.8	17.7	14.3	10.3	8.30	4.40
1.60V/cell	194.0	152.4	125.9	93.8	68.2	53.3	32.8	23.0	17.7	14.5	10.4	8.50	4.50

Specifications subject to change without notice.

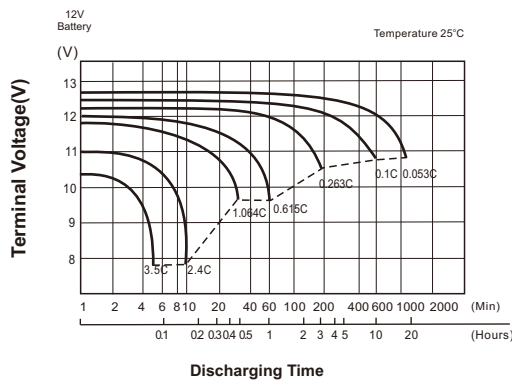
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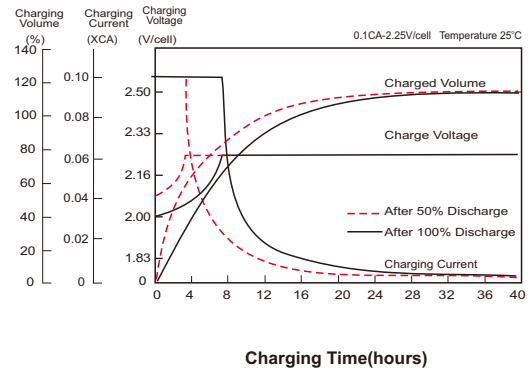
## Features & Benefits

- 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

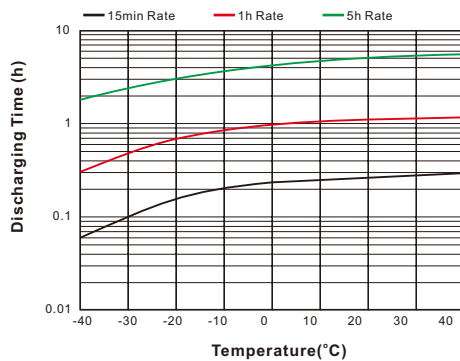
## Discharging Characteristics



## Charging Characteristics



## Effect of Temperature on Discharging Time



## Float Life

