



# HIGH PERFORMANCE PURE LEAD AGM BATTERIES

HIGH RATE LONG SHELF LIFE  
LONG STANDBY LIFE WIDE AMBIENT TEMPERATURE



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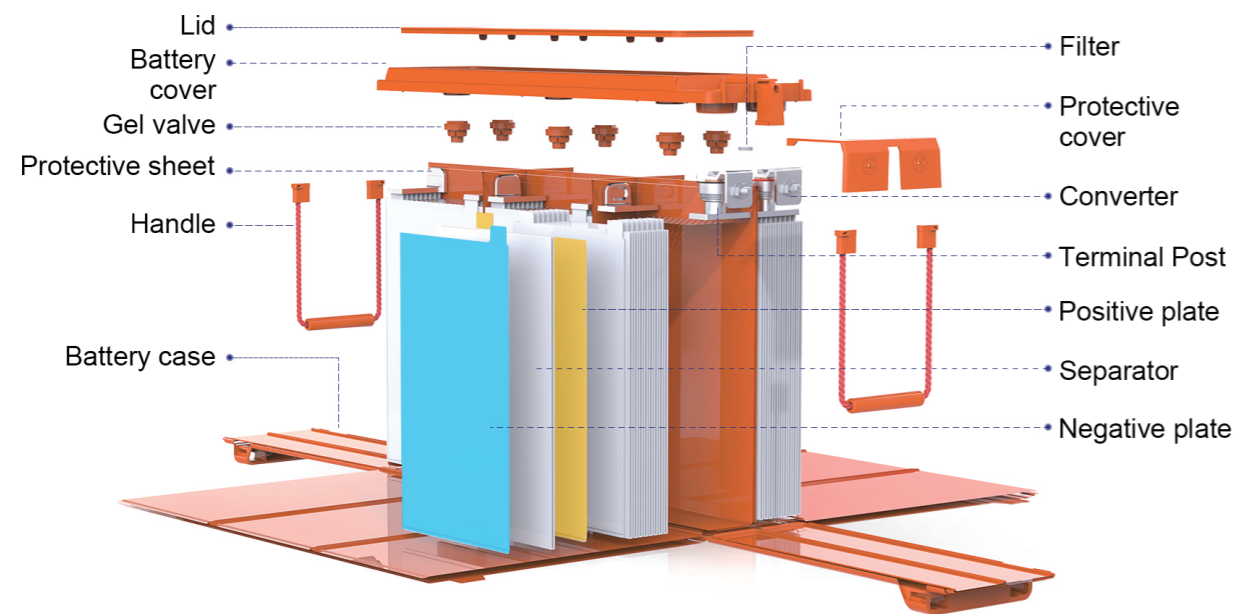
# PURE LEAD THIN PLATE TECHNOLOGY

LEOCH pure lead batteries are designed using state-of-the-art Pure Lead-Thin Plate technology to provide long service life in a compact space with high energy density. The pure lead battery is suitable for applications in both wireless and fixed-line telecommunications, UPS, cable TV, utilities and general standby applications.

LEOCH pure lead batteries have both front terminal and conventional layouts of 12V blocs. The front terminal types are designed for 19" and 23" racks in industry recognized footprints. The conventional 12V types are designed to fit popular applications.

LEOCH valve-regulated lead acid batteries use special thin pure lead plates to enhance rapid charging acceptance and endurance for a superior performance in extreme environmental conditions. The continuous plate production process is also used to ensure the battery consistency and reliability.

LEOCH provides the user with substantial benefits in the area of standby applications.



## OPERATION

- Float operation at 2.27 V/Cell at 25°C/77°F
- Designed for rack mounting as well as normal stands
- Minimal ventilation requirements
- Remote venting if required

## STANDARDS

- Complied with IEC 60896-21/22:2004
- Approved as non-hazardous for shipment according to international recognized codes
- Certified with ISO9001, ISO14001, IATF16949 and UL

## KEY FEATURES

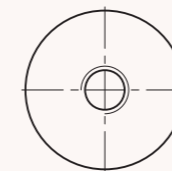
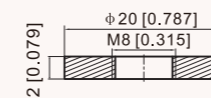
- Rapid high rate charging acceptance
- Long service life
- High energy density
- 12V mono-blocs in conventional and front-access layouts
- Pure Lead-Thin Plate VRLA battery technology
- Two year shelf life
- Wide operating temperature range (-40°C~+65°C)
- Excellent high rate discharge performance

## DESIGN FEATURES

- Advanced automated production machinery to ensure consistency and reliability
- Special PC-ABS plastic materials for battery containers to give excellent high/low temperature resistance
- Advanced AGM separators to prevent short circuit and increase plate group compression rate
- Step terminal sealing structure and advanced EP ensure outstanding sealing of terminals
- COS welding and Pure Lead-Thin Plate technology designed for low internal resistance and high rate discharge
- Heat sealing technology, starved electrolyte concept for good sealing and better safe concerns
- Low self-discharging rate, 2 year shelf life @ 25°C(77°F)
- Strong M8 brass terminals for high rate discharge
- ABS co-polymer flame retardant container for UL94V-0
- Special design to prevent water loss
- Thin plate design for fast charging

## TERMINALS

### T11 Terminal

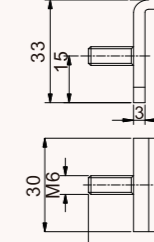


Brass Coated With Tin;  
Threaded insert 6mm STUD  
Torque:3.9~5.4 N\*m

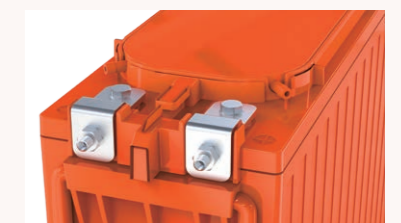


### T6 Terminal

Threaded M6(T11)insert with M6/M8 front terminal adaptor



Unit: mm



# LONG STANDBY LIFE PLH SERIES

## GENERAL FEATURES

- Capacity range: 38~210Ah
- Longer service life: 20 years design life at 25°C, 2 years shelf life
- Thin plate technology, suitable for unstable power grids
- Lower self-discharge:  $\leq 2\%$  per month at 25°C
- Temperature range: -40~65°C
- Case material: ABS+PC, higher strength, better heat resistance



## TYPICAL APPLICATIONS

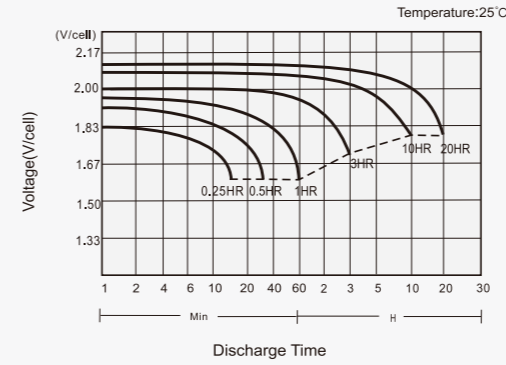
- Telecommunication
- Uninterruptible Power Supply(UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency lighting
- Railway signal
- Aircraft signal
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply
- DC power supply
- Auto control system
- Network Communication

## PLH SERIES MODELS AND PARAMETERS

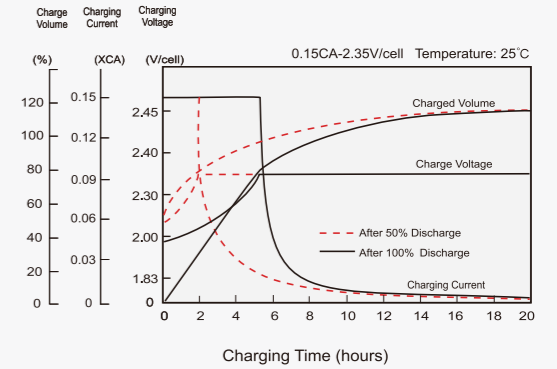
Model	Rated Voltage (V)	10hr@1.80 V/cell	L(mm)	W(mm)	H(mm)	TH(mm)	Gross Weight (kg/lbs)	Terminal Type
PLH40FT(A)	12	38	298.7	97	184	184	12.5/27.6	T6(M6)
PLH62FT(A)	12	62	298.7	97	267	267	19.1/43.0	T6(M6)
PLH90FT(A)	12	90	405.4	108	287	287	28.7/63.3	T8(M6)
PLH100FT(A)	12	100	405.4	108	287	287	30.8/67.9	T8(M6)
PLH110FT(A)	12	110	559	125	227	227	36.5/80.5	T8(M6)
PLH150FT(A)	12	150	559	125	277	277	48.0/105.8	T8(M6)
PLH170FT(A)	12	170	559	125	320	320	54.2/119.5	T8(M6)
PLH190FT(A)	12	190	559	125	320	320	57.6/127.0	T8(M6)
PLH210FT(A)	12	210	559	125	328	328	60.5/133.4	T8(M6)

## PLH SERIES PERFORMANCE CHARACTERISTICS

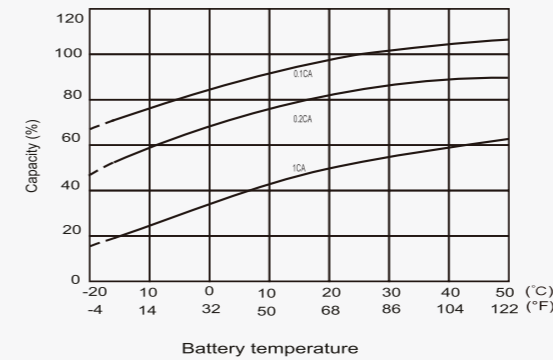
### Discharge Characteristics



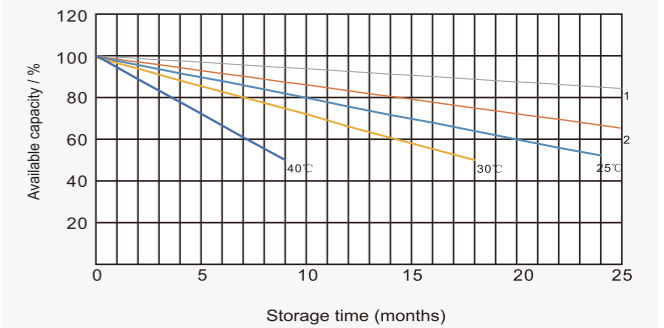
### Charging Characteristics



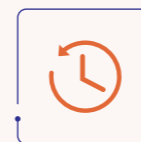
### Effects of Temperature on Discharging Time



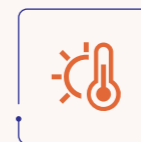
### Self Discharge Characteristics



## PRODUCT ADVANTAGES



Thin Plate design, Punching Technology, unique corrosion resistant alloy formula, extends battery life.



High temperature case material for extreme temperatures.



Highly automated produce, superior consistency and reliability.



Front terminal type, which saves installation space.

# HIGH RATE PLX SERIES

## GENERAL FEATURES

- Wide power range: 240W~730W(15minr)
- Longer service life: 15 years design life at 25°C, 2 years shelf life
- Thin plate technology to improve large power discharge performance
- Lower self-discharge:  $\leq 2\%$  per month at 25°C
- Temperature range: -40~65°C
- Case material: ABS+PC, higher strength, better heat resistance



## TYPICAL APPLICATIONS

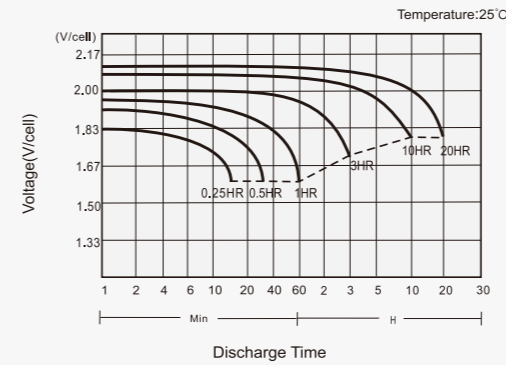
- UPS (High rate)
- High power backup supply
- Emergency power supply
- Starting system
- Power tools
- Emergency lighting
- Electrical starting

## PLX SERIES MODELS AND PARAMETERS

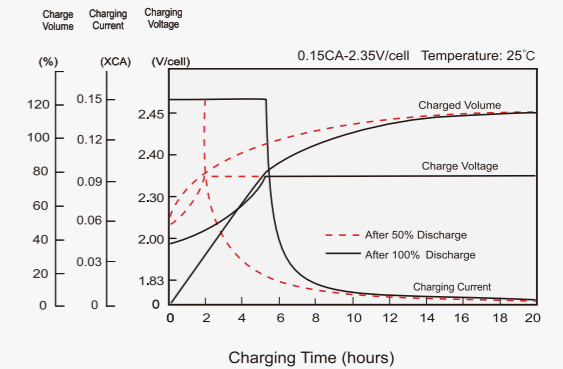
Model	Rated Voltage (V)	W15min@ 1.67V/cell	10hr@1.80 V/cell	L(mm)	W(mm)	H(mm)	TH(mm)	Gross Weight (kg/lbs)	Terminal Type
PLX12-260FT(A)	12	260	62	298.7	97	267	267	19.5	T6(M6)
PLX12-400FT(A)	12	400	100	405.4	108	287	287	31.5	M6(M8 optional)
PLX12-450FT(A)	12	450	110	559	125	227	227	37.7	M6(M8 optional)
PLX12-620FT(A)	12	620	150	559	125	277	277	48.5	M6(M8 optional)
PLX12-700FT(A)	12	700	190	559	125	320	320	58	M6(M8 optional)
PLX12-730FT	12	730	200	571	125	320	320	61	M6(M8 optional)
PLX12-240	12	240	50	229	138	200	203	16.9	M6(M8 optional)
PLX12-330	12	330	80	260	168	208	211	25.3	M6(M8 optional)
PLX12-405	12	405	92.8	306	168	207	210	30.1	M6(M8 optional)
PLX12-420	12	420	100	340.9	170	213.2	215.7	33.5	M6(M8 optional)
PLX12-460	12	460	105	340.9	170	213.5	215.7	33.8	M6(M8 optional)
PLX12-500	12	500	125	340.9	170	273.2	275.7	41.7	M6(M8 optional)
PLX12-540	12	540	135	340.9	170	273.2	275.7	43.5	M6(M8 optional)
PLX12-620	12	620	145	340.9	170	273.2	275.7	44	M6(M8 optional)

## PLX SERIES PERFORMANCE CHARACTERISTICS

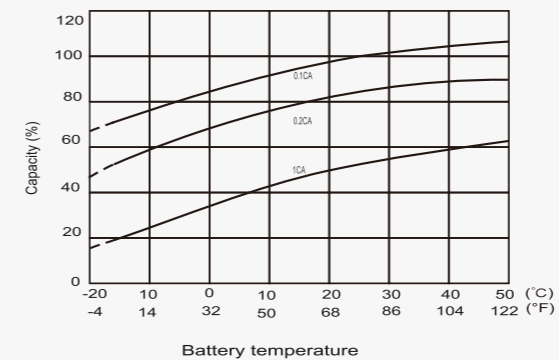
### Discharge Characteristics



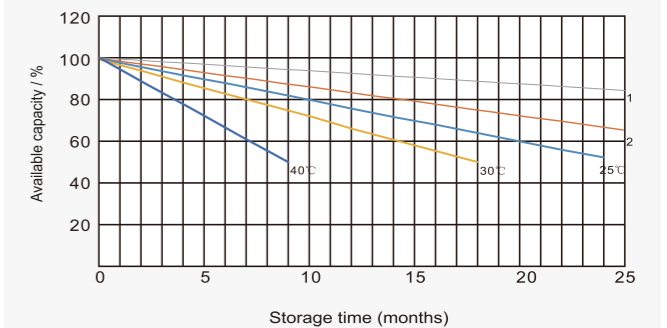
### Charging Characteristics



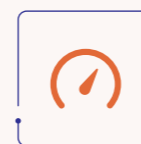
### Effects of Temperature on Discharging Time



### Self Discharge Characteristics



## PRODUCT ADVANTAGES



Pure lead design, focus on 15min rate



Top and front terminals are optional, saving footprint



Higher power density, stronger overcurrent capability



Multi-layer sealing technology