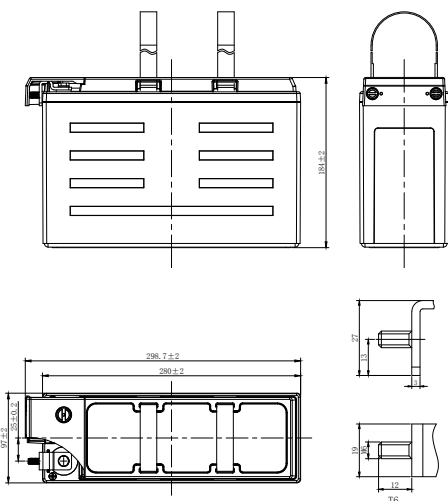
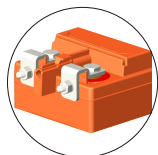


# PLH-PURE LEAD LONG STANDBY LIFE

## PLH40FT(A) (12V38Ah)



### CHARACTERISTICS

| Item                          | Specifications               |  |
|-------------------------------|------------------------------|--|
| Rated Voltage                 | 12V                          |  |
| Nominal Capacity (25°C)       | C <sub>10</sub> , 1.80V/cell | 38Ah   |
|                               | C <sub>8</sub> , 1.75V/cell  | 38Ah   |
| Dimension                     | Length                       | 298.7mm (11.8inches)   |
|                               | Width                        | 97mm (3.82inches)  |
|                               | Container Height             | 184mm (7.24inches)   |
|                               | Total Height                 | 184mm (7.24inches)   |
| Approx Weight                 | 12.5kg (27.6lbs)             |  |
| Terminal                      | T6(M6)                       |  |
| Container Material            | PC-ABS (UL94 V-0)            |  |
| Short-circuit current         | 760A                         |  |
| Internal Resistance (25°C)    | Approx 6 mΩ (Fully charged)  |  |
| Operating Temp. Range         | Discharge                    | -40~65°C (-40~149°F)   |
|                               | Charge                       | -20~54°C (-4~129°F)  |
|                               | Storage                      | -20~50°C (-4~122°F)  |
| Nominal Operating Temp. Range | 25±3°C (77±5°F)              |  |
| Max.Charging Current (25°C)   | 0.3C                         |  |
| Charge voltage (25°C)         | Float Charge                 | Equalization Charge  |
|                               | 2.27±0.02V/cell              | 2.35-2.40V/cell  |
| Temp. Coefficient             | -3mV/cell/°C                 | -4mV/cell/°C   |
|                               | 40°C (104°F)                 | 103%   |
| Effect of temp. to Capacity   | 25°C (77°F)                  | 100%   |
|                               | 0°C (32°F)                   | 86%  |
|                               | Self Discharge               | PLH series batteries can be stored up to 24 months at 25°C(77°F). For higher temperatures the time interval will be shorter. 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. |

### DISCHARGE TABLE

| 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 | 10.6 | 8.50 | 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 | 10.7 | 8.56 | 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 | 10.8 | 8.59 | 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 | 10.9 | 8.63 | 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 | 11.0 | 8.65 | 7.20 | 4.86 | 3.94 | 2.18 |
| 1.60V/cell   | 110.6 | 85.1  | 69.0  | 50.0  | 35.7  | 27.4 | 16.6 | 11.1 | 8.69 | 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   | 147.4 | 122.8 | 106.0 | 83.1  | 62.6  | 49.0 | 31.8 | 21.2 | 17.1 | 13.4 | 9.26 | 7.58 | 4.25 |
| 1.80V/cell   | 161.9 | 133.1 | 112.4 | 86.6  | 64.7  | 50.4 | 32.0 | 21.4 | 17.1 | 13.7 | 9.40 | 7.72 | 4.32 |
| 1.75V/cell   | 169.8 | 137.8 | 116.4 | 88.6  | 65.9  | 51.6 | 32.0 | 21.5 | 17.2 | 13.9 | 9.57 | 7.80 | 4.36 |
| 1.70V/cell   | 176.0 | 141.9 | 118.8 | 90.4  | 66.9  | 52.2 | 32.3 | 21.7 | 17.2 | 14.2 | 9.66 | 7.79 | 4.40 |
| 1.67V/cell   | 189.0 | 149.2 | 123.4 | 92.4  | 67.8  | 52.8 | 32.4 | 21.7 | 17.2 | 14.4 | 9.76 | 7.92 | 4.41 |
| 1.60V/cell   | 194.0 | 152.4 | 126.0 | 93.5  | 68.2  | 52.7 | 32.4 | 21.8 | 17.2 | 14.5 | 9.82 | 7.94 | 4.57 |

# PLH-PURE LEAD LONG STANDBY LIFE

## PLH40FT(A) (12V38Ah)

### APPLICATIONS

- Telecommunication
- Railway signal
- Alarm and security system
- Power station systems
- Emergency power supply
- Electric Power System (EPS)
- Communication power supply

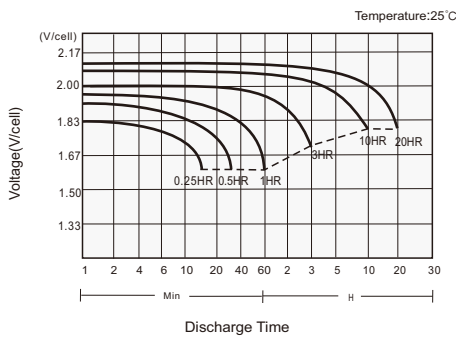
### GENERAL FEATURES

- 20 years design life (25°C)
- Utilizes pure lead technology. Thin positive grids and unique manufacturing process to maximize corrosion resistance and service life while increasing energy density
- High purity and superior quality AGM separators to reduce self discharge rates and float currents
- Case and cover are UL94 V-0 and highly resistant to shock, heat sealed and 100% tested to prevent leaks
- Front access design for easy installation and maintenance

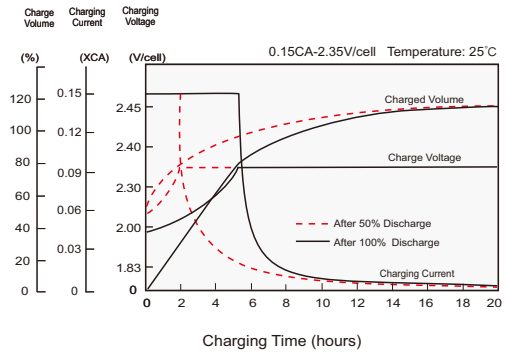
### STANDARDS

- Compliance with IEC 60896 standards
- Classified as "Very Long Life" according to Eurobat
- CE,UL Approved
- Manufactured in Leoch@IATF16949, ISO 45001,ISO 9001 and ISO 14001 certified production facilities

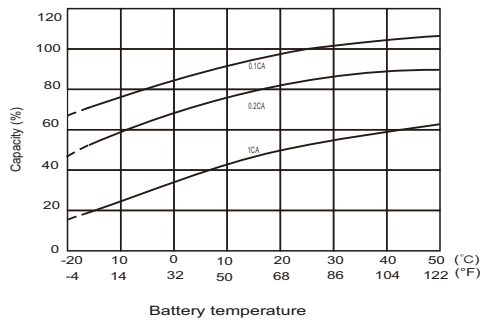
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

