Specifications

**Rated Voltage**
12V

**Nominal Capacity**
- C20, 1.80V/cell: 38Ah
- C100, 1.75V/cell: 38Ah

**Dimension**
- Length: 298.7x3mm (11.76 inches)
- Width: 97x2mm (3.82 inches)
- Container Height: 184x3mm (7.24 inches)
- Total Height: 184x3mm (7.24 inches)

**Approx. Weight**
12.5 Kg (27.5 lbs)

**Terminal**
M6

**Container Material**
PC-ABS flame retardant jar and cover to UL94 V-0

**Rated Capacity (25°C)**
- 42.4 Ah (20hr, 1.80V/cell)
- 38.0 Ah (10hr, 1.80V/cell)
- 34.8 Ah (5hr, 1.75V/cell)
- 32.4 Ah (3hr, 1.75V/cell)
- 27.2 Ah (1hr, 1.75V/cell)

**Max. Discharge Current**
456A

**Internal Resistance (25°C)**
Approx. 4.9mΩ (Fully charged)

**Operating Temp.Range**
- Discharge: -40 to 85°C (-40 to 149°F)
- Charge: 0 to 40°C (32 to 104°F)
- Storage: -20 to 40°C (-4 to 104°F)

**Nominal Operating Temp. Range**
25±3°C (77±5°F)

**Max. Charging Current (25°C)**
11.4A

**Charge voltage (25°C)**
- Float: 13.62V
- Equalization: 14.1 to 14.4V

**Effect of temp. to Capacity**
- 40°C (104°F): 103%
- 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.

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

<table>
<thead>
<tr>
<th>F.V./Time</th>
<th>10min</th>
<th>15min</th>
<th>20min</th>
<th>30min</th>
<th>45min</th>
<th>1h</th>
<th>2h</th>
<th>3h</th>
<th>4h</th>
<th>5h</th>
<th>8h</th>
<th>10h</th>
<th>20h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.85V/cell</td>
<td>77.7</td>
<td>64.2</td>
<td>55.1</td>
<td>42.7</td>
<td>31.7</td>
<td>24.7</td>
<td>15.9</td>
<td>10.6</td>
<td>8.50</td>
<td>6.63</td>
<td>4.57</td>
<td>3.72</td>
<td>2.08</td>
</tr>
<tr>
<td>1.80V/cell</td>
<td>86.7</td>
<td>70.5</td>
<td>59.0</td>
<td>44.8</td>
<td>32.9</td>
<td>25.6</td>
<td>16.1</td>
<td>10.7</td>
<td>8.56</td>
<td>6.80</td>
<td>4.66</td>
<td>3.80</td>
<td>2.12</td>
</tr>
<tr>
<td>1.75V/cell</td>
<td>91.9</td>
<td>73.7</td>
<td>61.6</td>
<td>46.2</td>
<td>33.8</td>
<td>26.3</td>
<td>16.2</td>
<td>10.8</td>
<td>8.59</td>
<td>6.96</td>
<td>4.75</td>
<td>3.86</td>
<td>2.15</td>
</tr>
<tr>
<td>1.70V/cell</td>
<td>96.7</td>
<td>76.8</td>
<td>63.5</td>
<td>47.5</td>
<td>34.5</td>
<td>26.8</td>
<td>16.4</td>
<td>10.9</td>
<td>8.63</td>
<td>7.09</td>
<td>4.80</td>
<td>3.86</td>
<td>2.17</td>
</tr>
<tr>
<td>1.67V/cell</td>
<td>104.9</td>
<td>81.6</td>
<td>66.5</td>
<td>48.8</td>
<td>35.1</td>
<td>27.2</td>
<td>16.5</td>
<td>11.0</td>
<td>8.65</td>
<td>7.20</td>
<td>4.86</td>
<td>3.94</td>
<td>2.18</td>
</tr>
<tr>
<td>1.60V/cell</td>
<td>110.6</td>
<td>85.1</td>
<td>69.0</td>
<td>50.0</td>
<td>35.7</td>
<td>27.4</td>
<td>16.6</td>
<td>11.1</td>
<td>8.69</td>
<td>7.31</td>
<td>4.93</td>
<td>3.97</td>
<td>2.26</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>F.V./Time</th>
<th>10min</th>
<th>15min</th>
<th>20min</th>
<th>30min</th>
<th>45min</th>
<th>1h</th>
<th>2h</th>
<th>3h</th>
<th>4h</th>
<th>5h</th>
<th>8h</th>
<th>10h</th>
<th>20h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.85V/cell</td>
<td>147.4</td>
<td>122.8</td>
<td>106.0</td>
<td>83.1</td>
<td>62.6</td>
<td>49.0</td>
<td>31.8</td>
<td>21.2</td>
<td>17.1</td>
<td>13.4</td>
<td>9.26</td>
<td>7.58</td>
<td>4.25</td>
</tr>
<tr>
<td>1.80V/cell</td>
<td>161.9</td>
<td>133.1</td>
<td>112.4</td>
<td>86.6</td>
<td>64.7</td>
<td>50.4</td>
<td>32.0</td>
<td>21.4</td>
<td>17.1</td>
<td>13.7</td>
<td>9.40</td>
<td>7.72</td>
<td>4.32</td>
</tr>
<tr>
<td>1.75V/cell</td>
<td>169.8</td>
<td>137.8</td>
<td>116.4</td>
<td>88.6</td>
<td>65.9</td>
<td>51.6</td>
<td>32.0</td>
<td>21.5</td>
<td>17.2</td>
<td>13.9</td>
<td>9.57</td>
<td>7.80</td>
<td>4.36</td>
</tr>
<tr>
<td>1.70V/cell</td>
<td>176.0</td>
<td>141.9</td>
<td>118.8</td>
<td>90.4</td>
<td>66.9</td>
<td>52.2</td>
<td>32.3</td>
<td>21.7</td>
<td>17.2</td>
<td>14.2</td>
<td>9.66</td>
<td>7.79</td>
<td>4.40</td>
</tr>
<tr>
<td>1.67V/cell</td>
<td>189.0</td>
<td>149.2</td>
<td>123.4</td>
<td>92.4</td>
<td>67.8</td>
<td>52.8</td>
<td>32.4</td>
<td>21.7</td>
<td>17.2</td>
<td>14.4</td>
<td>9.76</td>
<td>7.92</td>
<td>4.41</td>
</tr>
<tr>
<td>1.60V/cell</td>
<td>194.0</td>
<td>152.4</td>
<td>126.0</td>
<td>93.5</td>
<td>68.2</td>
<td>52.7</td>
<td>32.4</td>
<td>21.8</td>
<td>17.2</td>
<td>14.5</td>
<td>9.82</td>
<td>7.94</td>
<td>4.57</td>
</tr>
</tbody>
</table>
PLH-Pure Lead Long Standby Life

PLH40FT(A) (12V38Ah)

Applications
- Telecommunication
- Railway signal
- Alarm and security system
- Power station systems
- Emergency power supply

General Features
- 20 years design life (25°C)
- Premium ABS+PC jar & covers, Flame Retardant to UL94 V-0
- High-rate performance, high energy density
- High quality AGM separators minimize electrical resistance to allow high current discharging properties

Standards
- Compliance with IEC 60896 standards
- Classified as “Very Long Life” according to Eurobat
- CE, UL Certified
- Manufactured in Leoch®IATF 16949, OHSAS 18001, ISO 9001 and ISO 14001 certified production facilities

Discharge Characteristics

Temperature 25°C

Terminal Voltage (V)

Discharge Time (h)

Charge Voltage

Charge Current

Capacity (%)

Effects of Temperature on Discharging Time

Temperature (°C)

Discharging Time (h)

Float Charging Characteristics

Temperature 25°C

Charge Current

Charging Voltage

Charge Volume

Charging Time (hours)

Float Life

Temperature 25°C

Capacity (%)

Float life (year)

Sales Offices Worldwide

China Sales Office
5th Floor, Xinbaoshu Bldg., Nanhai Blvd., Nanhai, Shenzhen, China. 518352
Tel: +86-755-8606060 (100 lines)
Fax: +86-755-26067269
E-mail: export@leoch.com

North America Sales Office
19751 Descartes
Foothill Ranch, CA 92610, USA
Tel: 949-588-5853
Fax: 949-588-5966
E-mail: sales@leoch.us

Hong Kong Sales Office
Workshop C, 33/F, TNL Tower, No. 3 Ho Shing Road, Tuen Wan, New Territories, Hong Kong
Tel: +852 25786668
Fax: +852 25786678
E-mail: sales.hk@leoch.com

UK Sales Office
9B Wheatstone Court, Wateneus, Business Park, Gloucester, GL2-2AQ, UK United Kingdom
Tel: +44(0) 1452 729426 / 1452 729086
Fax: +44 1452 609125
E-mail: Sales.Europe@leoch.com

Singapore Sales Office
No. 1 Tech Park Crescent,
Singapore 638131
Tel: +65 65636079
Fax: +65 65636079
E-mail: sales.sg@leoch.com

EMEA Sales Office
1 Deligiorgi St., 121 31 Athens,
Greece
Tel: +30 210 5760318 (2 lines)
E-mail: support_EMEA@leoch.com

Australia Sales Office
2/20 Turlington Place, Smithfield, NSW 2164
Australia
Tel: 02 9754 0950
E-mail: sales.au@leoch.com

India Sales Office
Shed no.A-53(b), 2nd Stage of Pinya Industrial Area,
Bangalore North Taluk, Bangalore-560058, India
Tel: +91-80-23400118/23440019
Fax: +91-80-23440017
E-mail: indiasales@leoch.com

Singapore Sales Office
No. 1 Tech Park Crescent,
Singapore 638131
Tel: +65 65636079
Fax: +65 65636079
E-mail: sales.sg@leoch.com

EMEA Sales Office
1 Deligiorgi St., 121 31 Athens,
Greece
Tel: +30 210 5760318 (2 lines)
E-mail: support_EMEA@leoch.com

Australia Sales Office
2/20 Turlington Place, Smithfield, NSW 2164
Australia
Tel: 02 9754 0950
E-mail: sales.au@leoch.com

India Sales Office
Shed no.A-53(b), 2nd Stage of Pinya Industrial Area,
Bangalore North Taluk, Bangalore-560058, India
Tel: +91-80-23400118/23440019
Fax: +91-80-23440017
E-mail: indiasales@leoch.com

© 2019 LEOCH. All rights reserved.
Trademarks and logos are the property of LEOCH and its affiliates unless otherwise noted.
Subject to revisions without prior notice.