PLH+C-Pure Lead Carbon
PLH+C 40FT (12V38Ah)

Specifications

Rated Voltage 12V
Nominal Capacity
- C20, 1.80V/cell 38Ah
- C5, 1.75V/cell 38Ah

Dimension
- Length 298.7±2mm (11.76 inches)
- Width 97±2mm (3.82 inches)
- Container Height 184±2mm (7.24 inches)
- Total Height 184±2mm (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)
- 36.0Ah (10hr, 3.80A, 1.80V/cell)
- 38.0Ah (8hr, 4.75A, 1.75V/cell)
- 35.9Ah (5hr, 7.18A, 1.75V/cell)
- 32.4Ah (3hr, 10.8A, 1.75V/cell)
- 28.1Ah (1hr, 28.1A, 1.67V/cell)

Max. Discharge Current 456A
Internal Resistance (25°C) Approx. 4.9mΩ (Fully charged)

Operating Temp. Range
- Discharge -40 to 65°C (-40 to 149°F)
- Charge 0 to 40°C (32 to 104°F)
- Storage -20 to 60°C (-4 to 140°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
- Temp. Coefficient -3mV/cell°C
- 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) 88%

Self Discharge
PLH+C 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>10 min</th>
<th>15 min</th>
<th>20 min</th>
<th>30 min</th>
<th>45 min</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>72.5</td>
<td>59.7</td>
<td>51.1</td>
<td>40.0</td>
<td>30.5</td>
<td>24.3</td>
<td>14.6</td>
<td>10.4</td>
<td>8.44</td>
<td>6.92</td>
<td>4.60</td>
<td>3.76</td>
<td>2.02</td>
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<tr>
<td>1.80V/cell</td>
<td>79.7</td>
<td>64.7</td>
<td>54.8</td>
<td>42.9</td>
<td>31.9</td>
<td>25.5</td>
<td>14.9</td>
<td>10.6</td>
<td>8.57</td>
<td>7.06</td>
<td>4.69</td>
<td>3.80</td>
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<td>1.75V/cell</td>
<td>87.1</td>
<td>69.9</td>
<td>58.6</td>
<td>44.7</td>
<td>33.4</td>
<td>26.8</td>
<td>15.3</td>
<td>10.8</td>
<td>8.74</td>
<td>7.18</td>
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<td>3.89</td>
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<tr>
<td>1.70V/cell</td>
<td>93.7</td>
<td>74.2</td>
<td>61.7</td>
<td>48.7</td>
<td>34.6</td>
<td>27.4</td>
<td>15.6</td>
<td>10.9</td>
<td>8.87</td>
<td>7.30</td>
<td>4.81</td>
<td>3.93</td>
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<td>76.4</td>
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<td>47.6</td>
<td>35.1</td>
<td>26.1</td>
<td>15.7</td>
<td>11.0</td>
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<td>7.30</td>
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<td>80.0</td>
<td>65.7</td>
<td>48.9</td>
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<td>28.4</td>
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Constant Power Discharge (Watts/cell) at 25°C (77°F)

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<thead>
<tr>
<th>F.V./Time</th>
<th>10 min</th>
<th>15 min</th>
<th>20 min</th>
<th>30 min</th>
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<th>1h</th>
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<th>5h</th>
<th>8h</th>
<th>10h</th>
<th>20h</th>
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<tbody>
<tr>
<td>1.85V/cell</td>
<td>143.8</td>
<td>112.8</td>
<td>97.0</td>
<td>75.2</td>
<td>57.5</td>
<td>48.2</td>
<td>27.6</td>
<td>20.5</td>
<td>16.6</td>
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<td>79.2</td>
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<td>7.59</td>
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<tr>
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<td>159.4</td>
<td>124.0</td>
<td>106.2</td>
<td>81.2</td>
<td>61.0</td>
<td>50.9</td>
<td>28.8</td>
<td>21.1</td>
<td>17.2</td>
<td>14.1</td>
<td>9.34</td>
<td>7.87</td>
<td>4.17</td>
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<tr>
<td>1.70V/cell</td>
<td>166.1</td>
<td>131.1</td>
<td>109.3</td>
<td>83.0</td>
<td>62.2</td>
<td>51.0</td>
<td>29.1</td>
<td>21.4</td>
<td>17.4</td>
<td>14.3</td>
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<td>7.75</td>
<td>4.21</td>
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<td>1.67V/cell</td>
<td>173.4</td>
<td>135.9</td>
<td>112.7</td>
<td>85.3</td>
<td>63.6</td>
<td>51.3</td>
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<td>1.60V/cell</td>
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<td>139.0</td>
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<td>86.5</td>
<td>64.3</td>
<td>51.8</td>
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<td>17.6</td>
<td>14.5</td>
<td>9.58</td>
<td>8.02</td>
<td>4.26</td>
</tr>
</tbody>
</table>
**PLH+C-Pure Lead Carbon**
**PLH+C 40FT (12V38Ah)**

**Applications**
- Backup Power
- Grid-connected Energy Storage System
- Off-grid Energy Storage System
- Demand charge reduction
- Time-of-Use bill management

**General Features**
- High energy density
- Low internal resistance and self-discharge rate
- Excellent fast charging acceptance: 1.5hour to 90% SOC
- Excellent high rate discharge performance in low temperature
- Super high PSoC cycle life

**Standards**
- Compliance with IEC 60896 standards
- Manufactured in Leoch®ATF1649,
  OHASAS 18001, ISO 9001 and ISO 14001 certified production facilities

**Discharge Characteristics**

**Temperature in Relation to Capacity**

**Cycle Life vs. Depth of Discharge**

**Self-discharge Characteristics**

**Sales Offices Worldwide**

<table>
<thead>
<tr>
<th>Sales Office</th>
<th>Address/Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>China Sales Office</td>
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<td>19265 Danzefair, Foothill Ranch, CA 92610, USA Tel: 949-588-5803 Fax: 949-588-5866 E-mail: <a href="mailto:sales@leoch.us">sales@leoch.us</a></td>
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</tr>
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</tr>
<tr>
<td>Australia Sales Office</td>
<td>2/109 Tarlington Place, Smithfield, NSW 2164 Australia Tel: 02 9756 3950 E-mail: <a href="mailto:sales.au@leoch.com">sales.au@leoch.com</a></td>
</tr>
<tr>
<td>India Sales Office</td>
<td>Shed No. A-513(1), 2nd Stage of Paayan Industrial Area, Bankura North Taska, Salkhet-560208, India Tel: +91-40-23466318/23440039 Fax: +91-40-23464017 E-mail: <a href="mailto:indiasales@leoch.com">indiasales@leoch.com</a></td>
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