LPL Series - Long Life Standby
LPL12-55(12V55Ah)

Specifications

Rated Voltage
12V

Nominal Capacity
55.0Ah
(C100, 1.80V/cell)

Dimension
Length
228 ± 3mm (8.98 inches)
Width
137 ± 2mm (5.39 inches)
Container Height
210 ± 3mm (8.27 inches)
Total Height
230 ± 3mm (9.06 inches)

Approx Weight
17.7 Kg (39.03 lbs)

Terminal
T9

Container Material
ABS

Rated Capacity (25°C)
59.0Ah (20hr, 2.95A, 1.80V/cell)
55.0Ah (10hr, 5.50A, 1.80V/cell)
51.0Ah (5hr, 10.2A, 1.75V/cell)
46.5Ah (3hr, 15.5A, 1.75V/cell)
35.8Ah (1hr, 35.8A, 1.60V/cell)

Max. Discharge Current
660A (5s)

Internal Resistance (25°C)
Approx 7.5mΩ

Operating Temp. Range
Discharge
-15 ~ 50°C (5 ~ 122°F)
Charge
0 ~ 40°C (32 ~ 104°F)
Storage
-15 ~ 40°C (5 ~ 104°F)

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

Cycle Use
Initial Charging Current less than 15.5A. Voltage 14.4V ~ 15.0V at 25°C (77°F). Temp. Coefficient -30mV/°C

Standby Use
Initial Charging Current less than 16.5A. Voltage 13.5V ~ 13.8V at 25°C (77°F). Temp. Coefficient -20mV/°C

Effect of temp. to Capacity

<table>
<thead>
<tr>
<th>Temperature</th>
<th>40°C (104°F)</th>
<th>25°C (77°F)</th>
<th>0°C (32°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>103%</td>
<td>100%</td>
<td>86%</td>
<td></td>
</tr>
</tbody>
</table>

Self Discharge
LPL series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.

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>6h</th>
<th>8h</th>
<th>10h</th>
<th>20h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.85V/cell</td>
<td>83.0</td>
<td>72.0</td>
<td>56.6</td>
<td>50.6</td>
<td>37.0</td>
<td>31.3</td>
<td>19.1</td>
<td>14.0</td>
<td>11.0</td>
<td>9.54</td>
<td>8.41</td>
<td>6.47</td>
<td>5.36</td>
<td>2.84</td>
</tr>
<tr>
<td>1.80V/cell</td>
<td>94.2</td>
<td>81.5</td>
<td>64.0</td>
<td>55.1</td>
<td>39.2</td>
<td>32.5</td>
<td>19.7</td>
<td>15.2</td>
<td>11.7</td>
<td>10.0</td>
<td>9.03</td>
<td>6.80</td>
<td>5.50</td>
<td>2.95</td>
</tr>
<tr>
<td>1.75V/cell</td>
<td>102.2</td>
<td>88.3</td>
<td>69.1</td>
<td>56.2</td>
<td>40.6</td>
<td>34.1</td>
<td>20.8</td>
<td>15.5</td>
<td>12.0</td>
<td>10.2</td>
<td>9.10</td>
<td>6.84</td>
<td>5.67</td>
<td>2.97</td>
</tr>
<tr>
<td>1.70V/cell</td>
<td>108.9</td>
<td>93.8</td>
<td>73.2</td>
<td>57.3</td>
<td>41.4</td>
<td>34.7</td>
<td>21.2</td>
<td>15.8</td>
<td>12.2</td>
<td>10.4</td>
<td>9.15</td>
<td>6.94</td>
<td>5.72</td>
<td>3.00</td>
</tr>
<tr>
<td>1.65V/cell</td>
<td>112.4</td>
<td>96.5</td>
<td>75.2</td>
<td>58.2</td>
<td>42.0</td>
<td>35.3</td>
<td>21.5</td>
<td>15.9</td>
<td>12.3</td>
<td>10.6</td>
<td>9.19</td>
<td>7.04</td>
<td>5.80</td>
<td>3.04</td>
</tr>
<tr>
<td>1.60V/cell</td>
<td>116.2</td>
<td>99.5</td>
<td>77.2</td>
<td>59.0</td>
<td>42.6</td>
<td>35.8</td>
<td>21.8</td>
<td>16.1</td>
<td>12.5</td>
<td>10.7</td>
<td>9.26</td>
<td>7.13</td>
<td>5.86</td>
<td>3.08</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>6h</th>
<th>8h</th>
<th>10h</th>
<th>20h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.85V/cell</td>
<td>156.1</td>
<td>136.2</td>
<td>107.6</td>
<td>96.7</td>
<td>71.1</td>
<td>60.6</td>
<td>37.1</td>
<td>27.4</td>
<td>21.6</td>
<td>18.8</td>
<td>16.6</td>
<td>12.8</td>
<td>10.7</td>
<td>5.66</td>
</tr>
<tr>
<td>1.80V/cell</td>
<td>174.7</td>
<td>152.4</td>
<td>120.4</td>
<td>104.4</td>
<td>74.9</td>
<td>62.4</td>
<td>38.2</td>
<td>29.6</td>
<td>22.9</td>
<td>19.7</td>
<td>17.8</td>
<td>13.5</td>
<td>11.1</td>
<td>5.86</td>
</tr>
<tr>
<td>1.75V/cell</td>
<td>186.4</td>
<td>162.7</td>
<td>128.5</td>
<td>105.8</td>
<td>77.1</td>
<td>65.2</td>
<td>40.0</td>
<td>30.1</td>
<td>23.3</td>
<td>20.0</td>
<td>17.9</td>
<td>13.5</td>
<td>11.2</td>
<td>5.91</td>
</tr>
<tr>
<td>1.70V/cell</td>
<td>196.0</td>
<td>171.0</td>
<td>135.1</td>
<td>107.0</td>
<td>78.1</td>
<td>66.2</td>
<td>40.7</td>
<td>30.5</td>
<td>23.6</td>
<td>20.2</td>
<td>17.9</td>
<td>13.7</td>
<td>11.3</td>
<td>5.96</td>
</tr>
<tr>
<td>1.65V/cell</td>
<td>199.2</td>
<td>173.8</td>
<td>137.3</td>
<td>107.7</td>
<td>78.8</td>
<td>68.8</td>
<td>41.1</td>
<td>30.7</td>
<td>23.9</td>
<td>20.6</td>
<td>18.0</td>
<td>13.8</td>
<td>11.5</td>
<td>6.03</td>
</tr>
<tr>
<td>1.60V/cell</td>
<td>201.9</td>
<td>176.2</td>
<td>139.2</td>
<td>108.2</td>
<td>79.2</td>
<td>67.3</td>
<td>41.4</td>
<td>30.8</td>
<td>24.0</td>
<td>20.8</td>
<td>18.0</td>
<td>14.0</td>
<td>11.6</td>
<td>6.09</td>
</tr>
</tbody>
</table>

Layout
LPL Series-Long Life Standby
LPL12-55(12V55Ah)

Applications
- UPS and EPS
- Emergency lighting
- Railway signal and aircraft signal system
- Marine and power stations
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply
- DC power supply

General Features
- 12 years design life (25°C)
- Grid refining technology and the thicker plates are used to extend the battery standby life and reduce the plate grid corrosion speed
- Using oxygen recombination technology: maintenance-free
- Unique vent valve design: control water losing, prevent air and spark going inside

Discharge Characteristics

Floating Charging Characteristics

Temperature Effects in Relation to Battery Capacity

Effect of Temperature on Long Term Float Life

Sales Offices Worldwide

China Sales Office
5th Floor, Xinkuohai Bldg., Nanhai Blvd., Nanhai, Shenzhen, China. 518052
Tel: +86-755-26087268
Fax: +86-755-26087268
E-mail: export@leoch.com

HongKong Sales Office
Workshop C, 33/F, TML Tower, No. 3 Hoi Shing Road, Tsuen Wan, New Territories, Hong Kong
Tel: +852 1543 690125
E-mail: sales.hk@leoch.com

Singapore Sales Office
No. 1 Tech Park Crescent, Singapore 638131
Tel: +65 6863 6078
Fax: +65 6863 6079
E-mail: sales.sg@leoch.com

Australia Sales Office
2/29 Tarlington Place, Smithfield, NSW 2164
Australia
Tel: 02 9756 2950
E-mail: sales.au@leoch.com

UK Sales Office
9B Wheatslone Court, Waterwells, Business Park, Gloucester, GL2-2AQ, UK United Kingdom
Tel: +44 (0) 1452 720420 / 1452 720416
Fax: +44 1452 690125
E-mail: Sales.Europe@leoch.com

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

India Sales Office
Shed no.A-53(b), 2nd Stage of Peenya Industrial Area, Bangalore North, Taluk, Bangalore-560058, India
Tel: +91-80-23440519 / 23440017
Fax: +91-80-23440017
E-mail: indiasales@leoch.com

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

© 2018 LEOCH. All rights reserved.
Trademarks and logos are the property of LEOCH and its affiliates unless otherwise noted.
Subject to revisions without prior notice.

Publication No.: LB-LPL12-55-PD-EN-V1.1-201904