**Powered by CSB BATTERY®**

GP 12170  ▶  12V 17Ah

GP 12170 is a general purpose battery up to 5 years in standby service or more than 260 cycles at 100% discharge in cycle service. As with all CSB batteries, all are rechargeable, highly efficient, leak proof and maintenance free.

**Specification**

- **Cells Per Unit**: 6
- **Voltage Per Unit**: 12
- **Capacity**: 17A h @ 20hr-rate to 1.75V per cell @25 °C (77 °F)
- **Weight**: Approx. 5.5 kg (12.13 lbs)
- **Maximum Discharge Current**: 230A (5sec)
- **Internal Resistance**: Approx. 16 mΩ
- **Operating Temperature Range**: Discharge: -15 °C ~ 50 °C (5 °F ~ 122 °F)
  
  Charge: -15 °C ~ 40 °C (5 °F ~ 104 °F)
  
  Storage: -15 °C ~ 40 °C (5 °F ~ 104 °F)
  
  Nominal Operating Temperature Range: 25 °C ± 3 °C (77 °F ± 5 °F)
  
  Float Charging Voltage: 13.5 to 13.8 VDC/unit Average at 25 °C (77 °F)
  
  **Recommended Maximum Charging Current Limit**: 5.1A
  
  **Equalization and Cycle Service**: 14.4 to 15.0 VDC/unit Average at 25 °C (77 °F)
  
  **Self Discharge**: CSB Batteries can be stored for more than 6 months at 25 °C (77 °F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
  
  **Terminal**: B1/B3-L terminal to accept M5 nut & bolt
  
  **Container Material**: ABS (UL 94-HB/File E50263) *Flammability resistance of (UL 94-V0/File E88637) can be available upon request.

**Dimensions**

<table>
<thead>
<tr>
<th>Unit: mm (inch)</th>
<th>Overall Height (H)</th>
<th>Container height (h)</th>
<th>Length (L)</th>
<th>Width (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>167±2 (6.57±0.08)</td>
<td>165.5±2 (6.51±0.08)</td>
<td>181±2 (7.13±0.08)</td>
<td>76.2±1 (3.0±0.04)</td>
<td></td>
</tr>
</tbody>
</table>

**Constant Current Discharge Characteristics**  
Unit: A (25 °C, 77 °F)

<table>
<thead>
<tr>
<th>F.V/Time</th>
<th>5MIN</th>
<th>10MIN</th>
<th>15MIN</th>
<th>30MIN</th>
<th>1HR</th>
<th>2HR</th>
<th>3HR</th>
<th>4HR</th>
<th>5HR</th>
<th>8HR</th>
<th>10HR</th>
<th>20HR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.60V</td>
<td>80.2</td>
<td>50.9</td>
<td>38.5</td>
<td>23.4</td>
<td>13.8</td>
<td>8.03</td>
<td>5.72</td>
<td>4.44</td>
<td>3.63</td>
<td>2.37</td>
<td>1.93</td>
<td>1.00</td>
</tr>
<tr>
<td>1.67V</td>
<td>71.2</td>
<td>47.5</td>
<td>36.5</td>
<td>22.9</td>
<td>13.6</td>
<td>7.98</td>
<td>5.68</td>
<td>4.42</td>
<td>3.61</td>
<td>2.35</td>
<td>1.89</td>
<td>0.94</td>
</tr>
<tr>
<td>1.70V</td>
<td>67.4</td>
<td>45.8</td>
<td>35.6</td>
<td>22.7</td>
<td>13.6</td>
<td>7.98</td>
<td>5.68</td>
<td>4.42</td>
<td>3.61</td>
<td>2.35</td>
<td>1.89</td>
<td>0.94</td>
</tr>
<tr>
<td>1.75V</td>
<td>61.0</td>
<td>43.1</td>
<td>34.1</td>
<td>22.3</td>
<td>13.4</td>
<td>7.93</td>
<td>5.65</td>
<td>4.41</td>
<td>3.60</td>
<td>2.33</td>
<td>1.86</td>
<td>0.91</td>
</tr>
<tr>
<td>1.80V</td>
<td>54.5</td>
<td>40.2</td>
<td>32.7</td>
<td>21.8</td>
<td>13.3</td>
<td>7.87</td>
<td>5.61</td>
<td>4.38</td>
<td>3.58</td>
<td>2.30</td>
<td>1.83</td>
<td>0.88</td>
</tr>
<tr>
<td>1.85V</td>
<td>48.0</td>
<td>37.3</td>
<td>31.0</td>
<td>21.2</td>
<td>13.1</td>
<td>7.81</td>
<td>5.57</td>
<td>4.36</td>
<td>3.57</td>
<td>2.28</td>
<td>1.80</td>
<td>0.85</td>
</tr>
</tbody>
</table>

**Constant Power Discharge Characteristics**  
Unit: W (25 °C, 77 °F)

<table>
<thead>
<tr>
<th>F.V/Time</th>
<th>5MIN</th>
<th>10MIN</th>
<th>15MIN</th>
<th>30MIN</th>
<th>1HR</th>
<th>2HR</th>
<th>3HR</th>
<th>4HR</th>
<th>5HR</th>
<th>8HR</th>
<th>10HR</th>
<th>20HR</th>
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<tbody>
<tr>
<td>1.60V</td>
<td>890</td>
<td>583</td>
<td>449</td>
<td>281</td>
<td>166</td>
<td>96.4</td>
<td>68.6</td>
<td>53.3</td>
<td>43.6</td>
<td>28.4</td>
<td>23.1</td>
<td>12.0</td>
</tr>
<tr>
<td>1.67V</td>
<td>790</td>
<td>544</td>
<td>423</td>
<td>275</td>
<td>164</td>
<td>96.0</td>
<td>68.5</td>
<td>53.1</td>
<td>43.4</td>
<td>28.3</td>
<td>22.8</td>
<td>11.5</td>
</tr>
<tr>
<td>1.70V</td>
<td>748</td>
<td>527</td>
<td>413</td>
<td>272</td>
<td>163</td>
<td>95.8</td>
<td>68.4</td>
<td>53.0</td>
<td>43.3</td>
<td>28.2</td>
<td>22.7</td>
<td>11.3</td>
</tr>
<tr>
<td>1.75V</td>
<td>677</td>
<td>493</td>
<td>395</td>
<td>267</td>
<td>161</td>
<td>95.3</td>
<td>67.9</td>
<td>52.8</td>
<td>43.2</td>
<td>27.9</td>
<td>22.4</td>
<td>10.9</td>
</tr>
<tr>
<td>1.80V</td>
<td>605</td>
<td>460</td>
<td>377</td>
<td>261</td>
<td>160</td>
<td>94.6</td>
<td>67.3</td>
<td>52.6</td>
<td>43.0</td>
<td>27.6</td>
<td>22.0</td>
<td>10.5</td>
</tr>
<tr>
<td>1.85V</td>
<td>533</td>
<td>427</td>
<td>361</td>
<td>254</td>
<td>158</td>
<td>93.8</td>
<td>66.8</td>
<td>52.3</td>
<td>42.9</td>
<td>27.3</td>
<td>21.7</td>
<td>10.1</td>
</tr>
</tbody>
</table>

CSB-manufactured VRLA batteries are UL-recognized components under UL924 and UL1989.

CSB is also certified by ISO 9001 and ISO 14001.
Trickle (or Float) Service Life

Charge Voltage (V/Cell) 2.275 V/Cell

Capacity Retention Characteristic

No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required).

The supplementary charge required before use. The supplementary charge will help to recover the capacity and should be made as early as possible.

Supplementary charge may often fail to recover the capacity. The battery should never be left standing if this state is reached.

Battery Voltage and Charge Time for Standby Use

Discharge Depth 100% 50% 25%
Ambient Temperature 25°C (77°F)

Cycle Service Life

Terminal Voltage (V) and Discharge Time

Charging Procedures

Discharge Current VS. Discharge Voltage

Application | Charge Voltage (V/Cell) | Max. Charge Current | Final Discharge Voltage (V/Cell) | Discharge Current (A)
--- | --- | --- | --- | ---
Cycle Use | 25°C (77°F) 2.45 | 0.3C | 1.75 | 0.2C/0.5C
Standby | 25°C (77°F) 2.275 | 2.25-3.0A | 1.70 | 0.2C/0.5C

GP12170
12V 17Ah

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