6FM200D-X 12V 200Ah(10hr)

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

Battery Construction

<table>
<thead>
<tr>
<th>Component</th>
<th>Positive plate</th>
<th>Negative plate</th>
<th>Container</th>
<th>Cover</th>
<th>Safety valve</th>
<th>Terminal</th>
<th>Separator</th>
<th>Electrolyte</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw material</td>
<td>Lead dioxide</td>
<td>Lead</td>
<td>ABS</td>
<td>ABS</td>
<td>Rubber</td>
<td>Copper</td>
<td>Fiberglass</td>
<td>Sulfuric acid</td>
</tr>
</tbody>
</table>

General Features

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

Performance Characteristics

- Nominal Voltage: 12V
- Number of cell: 6
- Design Life: 10 years
- Nominal Capacity at 77°F (25°C):
  - 10 hour rate (20.0A, 10.8V): 200Ah
  - 5 hour rate (35.8A, 10.5V): 179.0Ah
  - 1 hour rate (126A, 9.6V): 126Ah
- Internal Resistance
  - Fully Charged battery at 77°F (25°C): 3.5mOhms
  - Self-Discharge: 3% of capacity declined per month at 20°C (average)
- Operating Temperature Range
  - Discharge: -20~60°C
  - Charge: -10~60°C
  - Storage: -20~60°C
- Max. Discharge Current at 77°F (25°C): 1000A (5s)
- Short Circuit Current: 3300A
- Charge Methods: Constant Voltage Charge at 77°F (25°C)
  - Cycle use: 14.4-14.7V
  - Maximum charging current: 60A
  - Temperature compensation: -30mV/°C
  - Standby use: 13.6-13.8V
  - Temperature compensation: -20mV/°C

Dimensions and Weight

- Length (mm / inch): 522 / 20.55
- Width (mm / inch): 238 / 9.37
- Height (mm / inch): 218 / 8.58
- Total Height (mm / inch): 223 / 8.78
- Approx. Weight (Kg / lbs): 65 / 143.3

Discharge Constant Current (Amperes at 77°F25°C)

<table>
<thead>
<tr>
<th>End Point Volts/Cell</th>
<th>5min</th>
<th>10min</th>
<th>15min</th>
<th>30min</th>
<th>45min</th>
<th>1h</th>
<th>3h</th>
<th>5h</th>
<th>10h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.60V</td>
<td>537</td>
<td>423</td>
<td>350</td>
<td>215</td>
<td>156</td>
<td>126</td>
<td>57.0</td>
<td>38.0</td>
<td>20.4</td>
</tr>
<tr>
<td>1.65V</td>
<td>489</td>
<td>403</td>
<td>340</td>
<td>207</td>
<td>150</td>
<td>122</td>
<td>55.0</td>
<td>37.0</td>
<td>20.3</td>
</tr>
<tr>
<td>1.70V</td>
<td>459</td>
<td>385</td>
<td>327</td>
<td>201</td>
<td>146</td>
<td>118</td>
<td>54.5</td>
<td>36.4</td>
<td>20.2</td>
</tr>
<tr>
<td>1.75V</td>
<td>439</td>
<td>367</td>
<td>310</td>
<td>195</td>
<td>142</td>
<td>115</td>
<td>52.9</td>
<td>35.8</td>
<td>20.1</td>
</tr>
<tr>
<td>1.80V</td>
<td>408</td>
<td>318</td>
<td>261</td>
<td>182</td>
<td>137</td>
<td>112</td>
<td>50.5</td>
<td>35.2</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Discharge Constant Power (Watts at 77°F25°C)

<table>
<thead>
<tr>
<th>End Point Volts/Cell</th>
<th>5min</th>
<th>10min</th>
<th>15min</th>
<th>30min</th>
<th>45min</th>
<th>1h</th>
<th>2h</th>
<th>3h</th>
<th>5h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.60V</td>
<td>876</td>
<td>727</td>
<td>607</td>
<td>392</td>
<td>288</td>
<td>227</td>
<td>137</td>
<td>108</td>
<td>72.6</td>
</tr>
<tr>
<td>1.65V</td>
<td>856</td>
<td>701</td>
<td>586</td>
<td>380</td>
<td>280</td>
<td>222</td>
<td>135</td>
<td>106</td>
<td>71.6</td>
</tr>
<tr>
<td>1.70V</td>
<td>816</td>
<td>677</td>
<td>569</td>
<td>373</td>
<td>274</td>
<td>218</td>
<td>132</td>
<td>104</td>
<td>70.8</td>
</tr>
<tr>
<td>1.75V</td>
<td>774</td>
<td>653</td>
<td>561</td>
<td>363</td>
<td>269</td>
<td>214</td>
<td>128</td>
<td>100</td>
<td>69.9</td>
</tr>
<tr>
<td>1.80V</td>
<td>737</td>
<td>619</td>
<td>538</td>
<td>355</td>
<td>265</td>
<td>212</td>
<td>125</td>
<td>97.0</td>
<td>69.0</td>
</tr>
</tbody>
</table>

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.