MULTI PURPOSE SERIES

MPS12-88 VALVE REGULATED LEAD ACID BATTERY

FOR STANDBY POWER APPLICATIONS

12V 88 AH @ 20 HR Rate,
12V 285 Watts/Cell @ 15 Min Rate

FEATURES

- Robust plate for extended life.
- Flame-arresting one-way pressure-relief vent for safety and long life.
- Durable polypropylene container and cover.
- Thermally welded case-to-cover bond to eliminate leakage.
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- UL-recognized component.
- Multicell design for economy of installation and maintenance.
- Can be used in any orientation. Upright, side, or end mounting recommended.
- Not restricted for air transport – Complies with IATA/ICAO Special Provision A67.
- Not restricted for surface transport – classified as non-hazardous material as related to DOT-CFR Title 49 parts 171-189.
- Not restricted for water transport – classified as non-hazardous material per IMDG Amendment 27.
- Computer designed lead, low calcium alloy grid for minimal gassing and ease of recycling.

SPECIFICATIONS

12 Volts – 88 Ampere Hour Capacity @ 20 Hour Rate

<table>
<thead>
<tr>
<th>Discharge in Hours</th>
<th>1.00</th>
<th>2.00</th>
<th>3.00</th>
<th>4.00</th>
<th>5.00</th>
<th>6.00</th>
<th>7.00</th>
<th>8.00</th>
<th>10.00</th>
<th>12.00</th>
<th>20.00</th>
<th>24.00</th>
<th>72.00</th>
<th>100.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amp-Hr Capacity</td>
<td>54.3</td>
<td>62.0</td>
<td>67.6</td>
<td>71.0</td>
<td>74.0</td>
<td>76.0</td>
<td>77.5</td>
<td>79.0</td>
<td>81.4</td>
<td>83.6</td>
<td>88.0</td>
<td>88.4</td>
<td>90.9</td>
<td>92.0</td>
</tr>
</tbody>
</table>
Specifications

<table>
<thead>
<tr>
<th>Cells Per Unit</th>
<th>Voltage Per Unit</th>
<th>Weight</th>
<th>Electrolyte</th>
<th>Maximum Discharge Current</th>
<th>Short Circuit Current</th>
<th>Ohms Imped.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>12.84</td>
<td>64 lbs.</td>
<td>Absorbed H₂SO₄</td>
<td>800 Amps</td>
<td>3300 Amps @ 0.1 sec.</td>
<td>0.0038 Ohms</td>
</tr>
</tbody>
</table>

Capacity
285 watts per cell at the 15 minute rate to 1.67 volts per cell at 77°F (25°C),
88.0 Ah @ 20 hr. rate to 1.75 volts per cell @ 77°F (25°C),
78.2 Ah @ 10 hr. rate to 1.80 volts per cell @ 68°F (20°C).

Operating Temperature Range
Discharge: -40°F (-40°C) to +160°F (71°C), Charge: -10°F (-23°C) to +140°F (60°C),
(with temperature compensation)

Recommended Operating Temperature Range
+74°F (23°C) to +80°F (27°C).

Float Charging Voltage
13.5 to 13.8 VDC/unit Average at 77°F (25°C).

Recommended Maximum Charging Current Limit
C/5 amperes (17.6 amperes @ 100% depth of discharge) @ 20 hour rate

Equalization and Cycle Service Charging Voltage
14.4 to 14.8 VDC/unit average at 77°F (25°C).

Maximum AC Ripple (Charger)
0.5% RMS or 1.5% P-P of float charge voltage recommended for best results. Maximum AC ripple voltage allowed = (4% P-P). Maximum AC ripple current allowed = 4.4 amperes rms (C/20).

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

Accessories
Inter unit connectors, racks and cabinet systems are available.

Terminal
“L” terminal with 0.28” clearance hole to accept 0.25” (6mm) bolt.

Terminal Hardware Initial Torque
65 in.-lbs. (7.35 N-m).

Terminal Hardware Annual Retorque
52 in.-lbs. (5.88 N-m).

Constant Power Discharge Ratings – Watts Per Cell @ 77°F (25°C)

<table>
<thead>
<tr>
<th>End Point Volts/Cell</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>60</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>460</td>
<td>340</td>
<td>270</td>
<td>225</td>
<td>173</td>
<td>145</td>
<td>133</td>
<td>123</td>
<td>106</td>
<td>78.0</td>
</tr>
<tr>
<td></td>
<td>510</td>
<td>355</td>
<td>280</td>
<td>233</td>
<td>175</td>
<td>146</td>
<td>135</td>
<td>124</td>
<td>107</td>
<td>79.0</td>
</tr>
<tr>
<td></td>
<td>525</td>
<td>365</td>
<td>285</td>
<td>235</td>
<td>178</td>
<td>147</td>
<td>136</td>
<td>125</td>
<td>108</td>
<td>79.5</td>
</tr>
<tr>
<td></td>
<td>530</td>
<td>370</td>
<td>290</td>
<td>237</td>
<td>180</td>
<td>148</td>
<td>137</td>
<td>126</td>
<td>109</td>
<td>80.0</td>
</tr>
<tr>
<td></td>
<td>550</td>
<td>375</td>
<td>293</td>
<td>239</td>
<td>183</td>
<td>149</td>
<td>138</td>
<td>127</td>
<td>110</td>
<td>80.5</td>
</tr>
</tbody>
</table>

Constant Current Discharge Ratings – Amperes @ 77°F (25°C)

<table>
<thead>
<tr>
<th>End Point Volts/Cell</th>
<th>.083</th>
<th>.25</th>
<th>.50</th>
<th>.75</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>20</th>
<th>24</th>
<th>72</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>145</td>
<td>101</td>
<td>68</td>
<td>54.7</td>
<td>41.4</td>
<td>25.4</td>
<td>18.5</td>
<td>12.3</td>
<td>8.40</td>
<td>6.95</td>
<td>5.93</td>
<td>3.83</td>
<td>3.24</td>
<td>1.11</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>184</td>
<td>120</td>
<td>77</td>
<td>62.3</td>
<td>47.7</td>
<td>28.2</td>
<td>20.5</td>
<td>13.5</td>
<td>9.10</td>
<td>7.60</td>
<td>6.50</td>
<td>4.11</td>
<td>3.45</td>
<td>1.20</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>222</td>
<td>132</td>
<td>85</td>
<td>68.0</td>
<td>51.0</td>
<td>30.3</td>
<td>22.0</td>
<td>14.4</td>
<td>9.60</td>
<td>7.69</td>
<td>6.75</td>
<td>4.30</td>
<td>3.61</td>
<td>1.25</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>252</td>
<td>144</td>
<td>90</td>
<td>72.1</td>
<td>54.3</td>
<td>31.0</td>
<td>22.5</td>
<td>14.8</td>
<td>9.90</td>
<td>8.14</td>
<td>6.97</td>
<td>4.4</td>
<td>3.68</td>
<td>1.26</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Note: Batteries to be mounted with 0.5 in. (1.25 cm) spacing minimum and free air ventilation. Specifications subject to change without notification.