Multi cycle

2 volt Cells

Whilst vertical installation is recommended, 2 V GEL cells can be installed up to 30 degree angle. Horizontal installation is not allowed. Shown below is a 1650 Ah (24 V) underfloor battery bank installed in the middle (central point) of a motor yacht. Weighing approximately 1.5 tonnes it is ideally positioned in terms of balance with its weight at the lowest possible point. Cables to connect the individual 2 V cells together are supplied as standard.

Recommended Use
- For both 2 V and 12 V GEL batteries:
- Charge according to three step process (IUoUo) (see page 69 and 75)
- Keep battery connected to the charger even when not in use
- Use the temperature sensor to monitor the temperature of the battery
- Use alternator only on ‘float voltage’
- Fit with ACR regulator as alternator will charge the battery faster and to 100%

GEL batteries - 2 V cells - forklift truck / traction quality
- Designed to last for over 10 years
- Suitable for high charge current (50% of nominal capacity)
- Ideal battery for large battery banks (600 to 8000 Ah)
- Best option for intensively used heavy duty inverter(s)
- Suitable for a large number of charge cycles (1200 to 3000 depending on discharge level)
- 7 year warranty (Restricted to cycles)
Technical specifications 2 V GEL

<table>
<thead>
<tr>
<th>Nominal capacity (C10, cell 1.80 V, 20°C)</th>
<th>2 V GEL 210 Ah</th>
<th>2 V GEL 440 Ah</th>
<th>V GEL 525 Ah</th>
<th>2 V GEL 750 Ah</th>
<th>2 V GEL 1000 Ah</th>
<th>2 V GEL 1250 Ah</th>
<th>2 V GEL 1500 Ah</th>
<th>2 V GEL 1650 Ah</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warranty (pro rata)</td>
<td>210 Ah</td>
<td>440 Ah</td>
<td>525 Ah</td>
<td>750 Ah</td>
<td>1000 Ah</td>
<td>1250 Ah</td>
<td>1500 Ah</td>
<td>1650 Ah</td>
</tr>
<tr>
<td>Cycles at 50% discharge</td>
<td>3500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ah rating based on C10</td>
<td>210 Ah</td>
<td>440 Ah</td>
<td>525 Ah</td>
<td>750 Ah</td>
<td>1000 Ah</td>
<td>1250 Ah</td>
<td>1500 Ah</td>
<td>1650 Ah</td>
</tr>
</tbody>
</table>

Weight ± 10%: 18.0kg 33.0kg 39.0kg 50.0kg 68.0kg 82.0kg 97.0kg 120.0kg
Terminal type: 2 × M8 2 × M8 2 × M8 2 × M8 4 × M8 4 × M8 4 × M8 4 × M8

**CHARGE / DISCHARGE PARAMETERS**

Bulk charge voltage (V/cell): 2.42 VDC at 20°C
Float voltage (V/cell): 2.25 VDC at 20°C
Initial charge current (A): 80 A 150 A 200 A 240 A 320 A 400 A 480 A 600 A
Recommended discharge voltage for 10 hours discharge (V/cell): 1.80 VDC/cell
Recommended discharge voltage for 1 hour discharge (V/cell): 1.65 VDC/cell

**NOMINAL CAPACITY AT 20°C**

<table>
<thead>
<tr>
<th>10 hours discharge</th>
<th>5 hours discharge</th>
<th>1-hour discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>210 Ah</td>
<td>180 Ah</td>
<td>88Ah</td>
</tr>
<tr>
<td>440 Ah</td>
<td>370 Ah</td>
<td>184 Ah</td>
</tr>
<tr>
<td>525 Ah</td>
<td>450 Ah</td>
<td>220 Ah</td>
</tr>
<tr>
<td>750 Ah</td>
<td>650 Ah</td>
<td>314 Ah</td>
</tr>
<tr>
<td>1000 Ah</td>
<td>865 Ah</td>
<td>489Ah</td>
</tr>
<tr>
<td>1250 Ah</td>
<td>1085 Ah</td>
<td>570 Ah</td>
</tr>
<tr>
<td>1500 Ah</td>
<td>1305 Ah</td>
<td>629Ah</td>
</tr>
<tr>
<td>1650 Ah</td>
<td>1355 Ah</td>
<td>647Ah</td>
</tr>
</tbody>
</table>

Peukert Coefficient: 1.21 < P < 1.23
Usage at 25 A discharge: 8h 15h 18h 24h 32h 40h 48h 60h
Self discharge: Less than 3% per month at 20°C

**BATTERY PARAMETERS**

Cyclic life at 80% discharge: 1250 1250 1250 1250 1250 1250 1250 1250
Internal resistance (approx.): 0.60mΩ 0.42mΩ 0.38mΩ 0.35mΩ 0.29mΩ 0.24mΩ 0.22mΩ 0.19mΩ

WhisperPower OPzV valve regulated batteries are ideally suited for applications with extended deep charge / discharge cycles. They are fully maintenance free. WhisperPower GEL batteries are constructed using tubular plate technology, wherein the electrolyte is contained in the GEL. They are widely used in emergency / back-up power supplies, marine and mobile battery banks and UPS installations.

Go to www.whisperpower.com for the complete measurements.