**PS-12180HD-M5**  
12V 18.0 AH @ 20-hr.  
12V 16.7 AH @ 10-hr.

Rechargeable Sealed Lead Acid Battery  
PS HD – Heavy Duty Series

**TERMINALS:** (mm)

T12: Threaded insert with 5mm stud fastener

**DIMENSIONS:** inch (mm)

L: 7.14 (181)  
W: 3.03 (77)  
H: 6.59 (167)  
HT: 6.59 (167)

Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

**FEATURES**
- Heavy duty (HD) construction with high vibration tolerance
- Punch-plate design yielding ultra-low impedance
- Absorbent Glass Mat (AGM) technology for superior performance
- High-rate discharge characteristics matching 'pure lead' products
- Valve regulated, maintenance free spill proof construction
- Rugged impact resistant ABS case and cover

**APPROVALS**
- U.L recognized
- ISO9001:2015 – Quality management systems

**PERFORMANCE SPECIFICATIONS**

Nominal Voltage  
12 volts (6 cells)

Rated Capacity  
- 20-hr. (900mA to 10.80 volts)  
- 10-hr. (1.7A to 10.80 volts)  
- 5-hr. (3.0A to 10.50 volts)  
- 1-hr. (11.1A to 9.60 volts)  
- 15-min. (31.9A to 9.60 volts)

Approximate Weight  
13.38 lbs. (6.07 kg)

Internal Resistance (approx.)  
8.0 milliohms

Max Discharge Current (5 min.)  
57.9 amperes

Max Short-Duration Discharge Current (5 Sec.)  
270.0 amperes

Shelf Life (% of nominal capacity at 68°F (20°C))
- 1 Month: 97%
- 3 Month: 91%
- 6 Month: 83%

Operating Temperature Range
- Charge: 5°F (-15°C) to 122°F (50°C)
- Discharge: -4°F (-20°C) to 140°F (60°C)

Case  
ABS Plastic

**Recommended Power Sonic Chargers**
- PSC-122000A-C
- PSC-124000A-C
- PSC-122000-PC
- PSC-124000-PC
- PSC-243500-PC

**To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website.**

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All data subject to change without notice. E&O.E

www.power-sonic.com
PS HD SERIES

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12V 18.0 AH @ 20-hr.
12V 16.7 AH @ 10-hr.

Rechargeable Sealed Lead Acid Battery
PS HD – Heavy Duty Series

SHELF LIFE & STORAGE

<table>
<thead>
<tr>
<th>Capacity Retention Ratio (%)</th>
<th>Standing Period (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>80</td>
<td>2</td>
</tr>
<tr>
<td>60</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>6</td>
</tr>
<tr>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Temperature (°C)</th>
<th>Capacity Retention Ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5°C (41°F)</td>
<td>100</td>
</tr>
<tr>
<td>20°C (68°F)</td>
<td>80</td>
</tr>
<tr>
<td>40°C (104°F)</td>
<td>40</td>
</tr>
</tbody>
</table>

Life Characteristics in Cyclic Use

<table>
<thead>
<tr>
<th>Discharge Depth</th>
<th>Number of Cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>1200</td>
</tr>
<tr>
<td>50%</td>
<td>800</td>
</tr>
<tr>
<td>30%</td>
<td>600</td>
</tr>
</tbody>
</table>

Charging

Charging is not necessary unless 100% of capacity is required.

Charging before use is necessary to help recover full capacity.

Charge may fail to restore full capacity. Do not let batteries reach this state.

Charging

Cycle Applications: Apply constant voltage charge at 2.35v/c – 2.45v/c (14.1 – 14.7v for 12v Monobloc) at 20°C. Initial charging current should be set at less than 0.25C Amps. Switch to float charge to avoid overcharging.

“Float” or “Stand-By” Service: Apply constant voltage charge of 2.25v/c – 2.30v/c (13.5 to 13.8 volts for 12v Monobloc at 20°C. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

Temperature Compensation: Charging Voltage for both Cyclic and Standby applications should be regulated in relation to ambient temperature. As temperature rises charging voltage should be reduced to prevent overcharge and increased as temperature falls to avoid undercharge.

For further charging information including temperature compensation factors, see Power Sonic Technical Manual/Power Sonic Charger specifications.

APPLICATIONS

- Fire and security
- Medical
- Emergency Lighting
- Solar
- Wind
- Wind

CHARGERS

Power Sonic offers a wide range of chargers suitable for batteries with a variety of capacities.

Please refer to our website for more information on our switch mode and transformer type chargers.

Please contact our technical department for advice if you have difficulty in locating a suitable charger.

FURTHER INFORMATION

Please refer to our website www.power-sonic.com for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc.