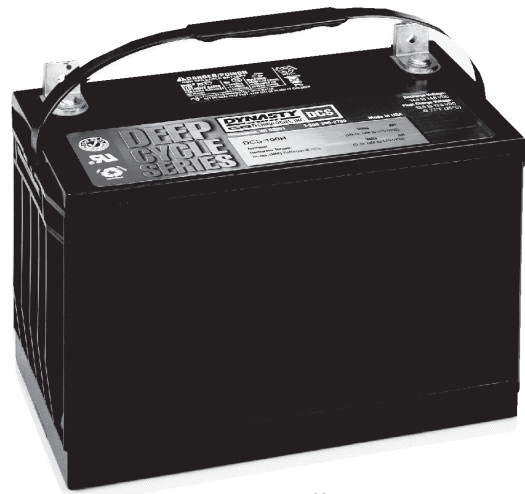


# DEEP CYCLE SERIES



DCS-100L

## DCS-100L

**VALVE REGULATED  
LEAD ACID BATTERY  
FOR DEEP CYCLE  
MOBILITY APPLICATIONS  
12V 81 AH @ 5 HR RATE  
12V 100 AH @ 20 HR RATE**

### FEATURES

- Robust plate for extended cycle life.
- Computer-generated grid design optimized for high power density.
- Low calcium grid alloy for reduced gas emissions and ease of recycling.
- Flame-arresting one-way pressure-relief vent for safety and long life.
- UL-recognized component.
- Multicell design for economy of installation and maintenance.
- Case and cover available in standard polypropylene.
- Thermally welded case-to-cover bond to eliminate leakage.
- Removable carrying handles.
- Can be used in any orientation. Upright, side, or end mounting recommended.
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- 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.

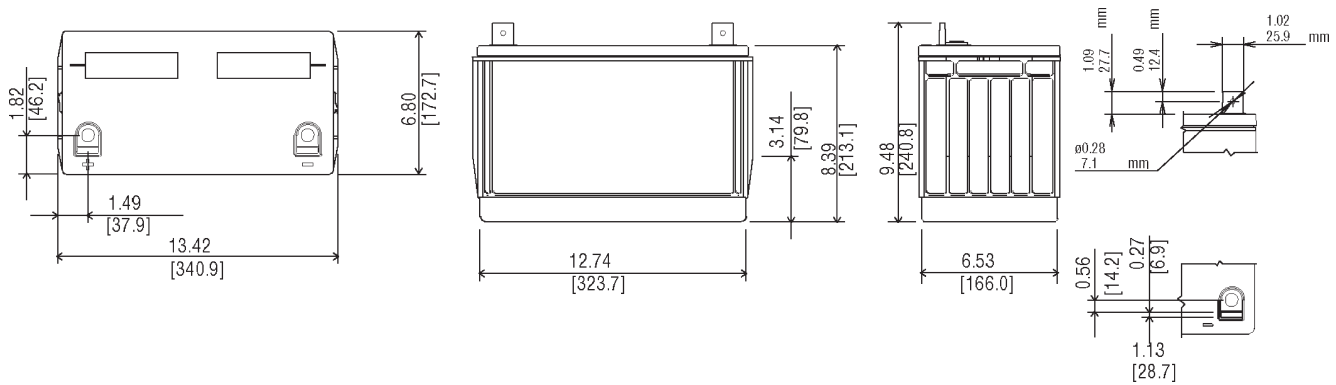
### 12 Volts – 100 Ampere Hour Capacity @ 20 Hour Rate

Ampere Hour Capacity to 1.75 Volts per Cell @ 77°F (25°C)

| Discharge in Hours | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 10.00 | 12.00 | 20.00 | 24.00 | 72.00 | 100.00 |
|--------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|--------|
| Amp-Hr Capacity    | 49.2 | 61.5 | 70.0 | 76.0 | 80.6 | 84.0 | 86.8 | 89.0 | 92.0  | 94.2  | 100.0 | 101.3 | 104.0 | 106.0  |

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## DCS-100L – Specifications

\*All dimensions in inches and (millimeters). All dimensions are for reference only. Contact a C&D Representative for complete dimensional information.

| Cells Per Unit | Voltage Per Unit | Weight           | Electrolyte   | Maximum Discharge Current | Short Circuit Current | Ohms Imped. 60 Hz (Ω) |
|----------------|------------------|------------------|---|---------------------------|-----------------------|-----------------------|
| 6              | 12.84            | 69 lbs.<br>31 kg | Absorbed H <sub>2</sub> SO <sub>4</sub><br>SG = 1.300 | 800 Amps                  | 3600 Amps @ 0.1 sec.  | 0.0035 Ohms           |

|  |   |
|--|---|
| <b>Capacity</b>  | 81.0 Ah @ 5 hr. rate to 1.75 volts per cell @ 77°F (25°C)<br>100 Ah @ 20 hr. rate to 1.75 volts per cell @ 77°F (25°C)<br>84.7 Ah @ 10 hr. rate to 1.80 volts per cell @ 20°C (68°F)                  |
| <b>Operating Temperature Range</b>                     | <b>Discharge;</b> -40°F (-40°C) to +160°F (71°C), <b>Charge;</b> -10°F (-23°C) to +140°F (60°C)<br>(with temperature compensation)  |
| <b>Recommended Operating Temperature Range</b>         | +74°F (23°C) to +80°F (27°C)  |
| <b>Float Charging Voltage</b>                          | 13.5 to 13.8 VDC/unit Average at 77°F (25°C).   |
| <b>Recommended Maximum Charging Current Limit</b>      | C/5 amperes (20.0 amperes @ 100% depth of discharge) @ 20 hour rate   |
| <b>Equalization and Cycle Service Charging Voltage</b> | 14.4 to 14.8 VDC/unit Average at 77°F (25°C).   |
| <b>Maximum AC Ripple (Charger)</b>                     | 0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.<br>Maximum AC ripple float charge voltage allowed = (4% P-P)<br>Maximum AC ripple current allowed = 5.0 amperes RMS (C/20) |
| <b>Self Discharge</b>                                  | Dynasty 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.                                |
| <b>Accessories</b>                                     | Inter unit connectors, racks and cabinet systems are available.   |
| <b>Terminal</b>  | "L" terminal with 0.28" clearance hole to accept 0.25" (6mm) bolt.  |
| <b>Terminal Hardware Initial Torque</b>                | 65 in.-lbs. (7.35 N-m).   |
| <b>Terminal Hardware Annual Retorque</b>               | 52 in.-lbs. (5.88 N-m).   |

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

Operating Time to End Point Voltage (in hours)

| End Point Volts/Cell | 1.00 | 2.00 | 3.00 | 4.00 | 5.00  | 6.00  | 7.00  | 8.00  | 10.00 | 12.00 | 20.00 | 24.00 | 72.00 | 100.00 |
|----------------------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1.90                 | 38.5 | 23.5 | 17.7 | 14.4 | 12.20 | 10.60 | 9.40  | 8.44  | 7.05  | 6.08  | 4.00  | 3.40  | 1.23  | 0.91   |
| 1.85                 | 42.0 | 26.5 | 19.7 | 16.0 | 13.60 | 11.80 | 10.45 | 9.38  | 7.86  | 6.80  | 4.48  | 3.80  | 1.35  | 0.99   |
| 1.80                 | 45.4 | 28.4 | 21.5 | 17.5 | 14.90 | 13.00 | 11.50 | 10.33 | 8.64  | 7.44  | 4.78  | 4.04  | 1.42  | 1.03   |
| 1.75                 | 49.2 | 30.8 | 23.3 | 19.0 | 16.12 | 14.00 | 12.40 | 11.13 | 9.20  | 7.85  | 5.00  | 4.22  | 1.44  | 1.06   |

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