# DCG77-12

## CYCLING CAPACITY

| | |
|---|---|
| 20 Hour Rate | **77 Amp Hours** |

## RESERVE CAPACITY

| | | | |
|---|---|---|---|
| Reserve @25 AMPS | **132 Minutes** | Reserve @75 AMPS | **33 Minutes** |

## ELECTRICAL SPECIFICATIONS

| | |
|---|---|
| Nominal Voltage | **12 Volt** |
| C100 | **85 AH** |
| C20 | **77 AH** |
| C10 | **70 AH** |
| C5 | **66 AH** |
| C3 | **57 AH** |
| C2 | **52 AH** |
| C1 | **47 AH** |
| Internal Resistance | **0.0m Ω** |

## MECHANICAL SPECIFICATIONS

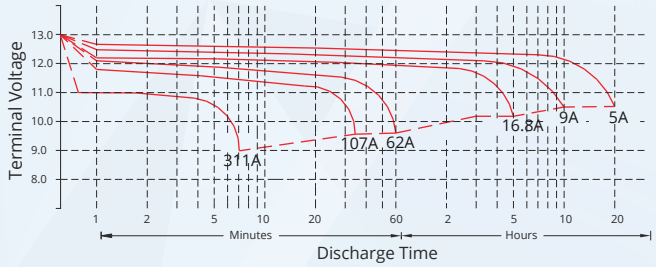
| | | |
|---|---|---|
| Group Size | **24** | |
| Terminal Type | **M8 w/ TP08 Brass AP** | |
| Terminal Torque | **See reverse side** | |
| Height (w/ terminal) | **9.65"** | **245 mm** |
| Height (case only) | **9.49"** | **241 mm** |
| Width | **10.24"** | **260 mm** |
| Length | **6.65"** | **169 mm** |
| Weight | **53.4 lbs** | **24.2 kg** |
| Case Type | **ABS Plastic -** Flame Res. Rating UL94-HB | |

## DISCHARGE TABLE (Constant Current)

| Time | Amps | Rate |
|---|---|---|
| 20hr | 3.9 | 0.05 CA |
| 10hr | 7.0 | 0.10 CA |
| 8hr | 8.4 | 0.13 CA |
| 5hr | 13.2 | 0.25 CA |
| 3hr | 19.0 | 0.33 CA |
| 2hr | 26.0 | 0.50 CA |
| 1hr | 47.0 | 1.00 CA |

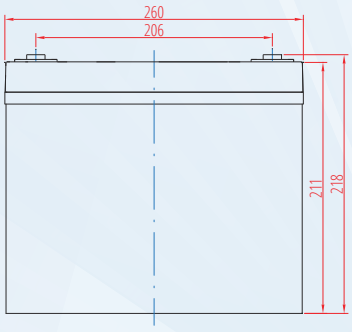
## DISCHARGE PROFILE (Constant Current)

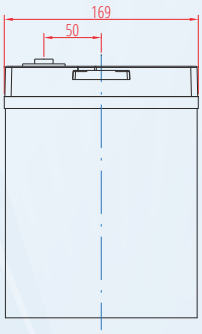
**12-Volt Battery** *Temperature: 77°F (25°C)*

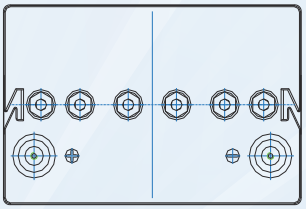



*- All listed ratings are @ 100% SoC, T=77°F (25°C), 1.75VPC unless otherwise specified.*
*- Specifications listed are for estimation purposes only. Battery performance can vary depending on application. Battery design subject to change.*

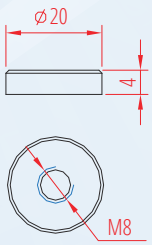
## BATTERY & TERMINAL DIMENSIONS (All units shown in mm)



**Terminal: M8**




DCG SERIES | DEEP CYCLE GEL

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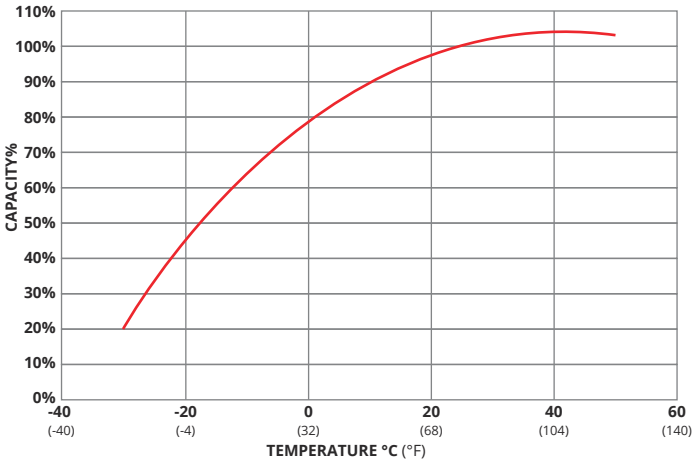
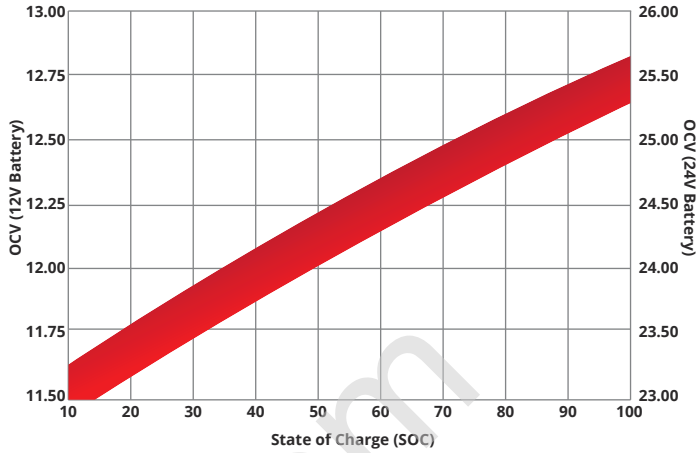
## TEMPERATURE vs CAPACITY

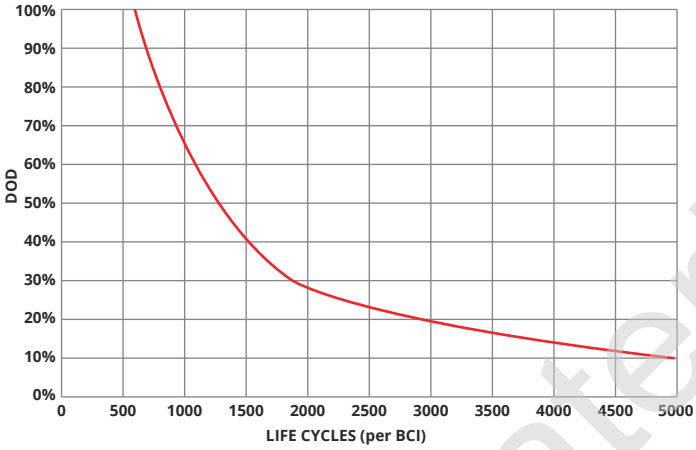



## STATE of CHARGE (SOC) vs OPEN CIRCUIT VOLTAGE (OCV)

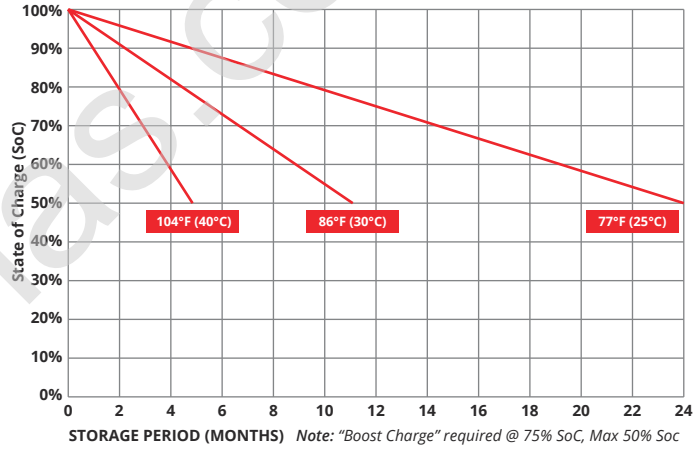



## CYCLE LIFE vs DEPTH of DISCHARGE (DOD)

*(Based on BCI Testing @ 2-hr Rate)




## SELF DISCHARGE vs TIME/TEMPERATURE




*Note: "Boost Charge" required @ 75% SoC, Max 50% Soc*

## TEMPERATURE RANGE SPECIFICATIONS

| Condition | Recommended | Maximum | Recommended | Maximum |
|---|---|---|---|---|
| Storage | 5°F to 122°F | -40°F to 160°F | -15°C to 50°C | -40°C to 71°C |
| Operation | 5°F to 104°F | -40°F to 160°F | -15°C to 40°C | -40°C to 71°C |
| Charge with TC | 5°F to 122°F | -40°F to 160°F | -15°C to 50°C | -40°C to 71°C |
| Charge w/o TC | 32°F to 104°F | 5°F to 122°F | 0°C to 40°C | -15°C to 50°C |

***TC=** *Temperature Compensation*

## CHARGE VOLTAGES

| | Battery Voltages | | | |
|---|---|---|---|---|
| **Charge Stage** | **12V** | **24V** | **36V** | **48V** |
| Bulk | 14.1 - 14.4V | 28.2 - 28.8V | 42.3 - 43.2V | 56.4 - 57.6V |
| Absorption | 14.1 - 14.2V | 28.2 - 28.4V | 42.3 - 42.6V | 56.4 - 57.0V |
| Float | 13.6V | 27.2V | 40.8V | 54.4V |
| **TC Factor: (-2mV°F/cell) or (-4mV°C/cell)** | | | | |

## TERMINAL TORQUE SPECS (applicable values are highlighted)

| M6, AP | M8 | M10 | M6M (Stud) | M8M (Stud) | M10M (Stud) | 3/8" Stud | FR45 | TP06 (AP) | TP08/TP68 (AP) |
|---|---|---|---|---|---|---|---|---|---|
| 4.1-5.8ft-lbs | 7.1-7.9ft-lbs | 9.6-12ft-lbs | 3.3-4.6ft-lbs | 4.9-6.3ft-lbs | 7.7-9.6ft-lbs | 8.9-12ft-lbs | 5.8-7.4ft-lbs | 3.3-4.6ft-lbs | 50-70ft-lbs |
| 50-70lbs-in | 85-95lbs-in | 115-141lbs-in | 40-56lbs-in | 58-75lbs-in | 92-115lbs-in | 106-150lbs-in | 70-90lbs-in | 40-56lbs-in | 63-83lbs-in |
| 5.6-7.9Nm | 9.6-10.7Nm | 13-16Nm | 4.5-6.3Nm | 6.6-8.5Nm | 10.4-13Nm | 12-16.9Nm | 7.9-10.1Nm | 4.5-6.3Nm | 7.1-9.4Nm |

ISO CERTIFIED

9001:2008 Quality Management System
14001:2004 Environmental Management System
18001:2007 Occupational Health & Safety Management System

DEEP 100% CYCLE

DELIVERY APPROVED!
LAND, SEA & AIR

Fullriver batteries are sealed lead acid batteries made with Absorbed Glass Mat (AGM) technology. The electrolyte is absorbed into the fiberglass separator material rather than in a free-flowing liquid form. Fullriver batteries are non-spillable electric storage batteries. They are excepted from the requirements of DOT's hazardous materials regulations, since they adhere to the requirements of code 49 CFR Section 173.159(D) - **(CLASSIFIED APPROVED: DOT, CFR, HMR49, IATA, ICAO67, IMDG27)**

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