

G U A R D I A N

NON-SPILLABLE RECHARGEABLE BATTERIES



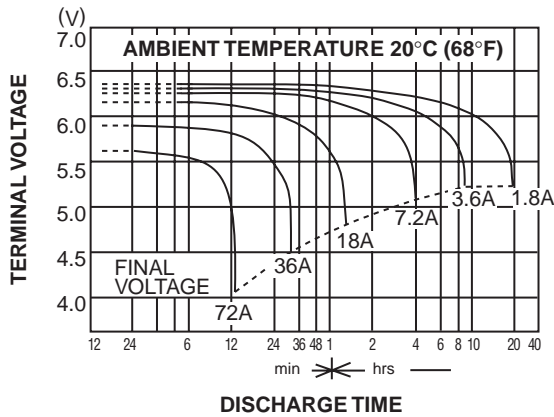
DG 6-36

Guardian rechargeable batteries are based on valve-regulated, lead-acid technology. The dilute sulphuric acid electrolyte is completely immobilized in an absorptive glass mat between the plates. Gases generated during overcharge are internally recombined at a high efficiency. The small amount of gas that doesn't recombine is allowed to escape by means of a special one-way vent valve, thus avoiding excessive pressure build-up. As a result of these design features, the battery is leak proof, non-corrosive, maintenance-free, and usable in any position.

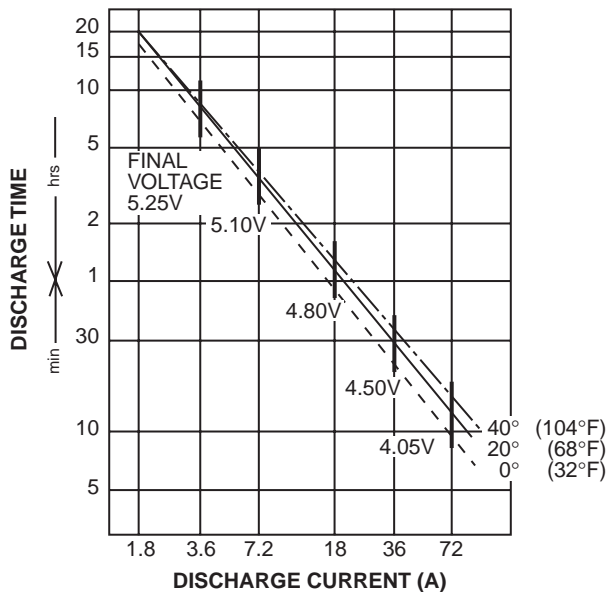
PERFORMANCE SPECIFICATIONS

Nominal Voltage	6 volts (3 cells in series)
Nominal Capacity	
20 hour rate (1800mA to 5.25 volts)	36.0 A.H.
10 hour rate (3200mA to 5.25 volts)	32.0 A.H.
5 hour rate (5600mA to 5.10 volts)	28.0 A.H.
1 hour rate (21A to 4.50 volts)	21.0 A.H.
Approximate Weight	13.3 pounds (6 kg)
Energy Density (20 hour rate)	1.59 Watt-hours/cubic inch (96.8 Watt-hours/l)
Specific Energy (20 hour rate)	16.24 Watt-hours/pound (36 Watt-hours/kg)
Internal Resistance (Fully Charged Battery)	10 milliohms (approximately)
Maximum Discharge Current (5 min.)	108 amperes
Standard Terminals.	Type G - Quick disconnect tabs, 0.250" x 0.032"
Optional Terminals	Type NB - Terminal posts with #10 nut & bolt fasteners.
Vibration Test (2000 cycles/minute, 0.10 inch excursion, 2 hours)	No loss in capacity or performance
Shelf Life – % of nominal capacity at 68°F (20°C)	
1 Month	97%
3 Months	91%
6 Months	83%
Operating Temperature Range	
Charge	-4°F (-20°C) to 122°F (50°C)
Discharge	-4°F (-20°C) to 140°F (60°C)
Case	High-Impact Polystyrene

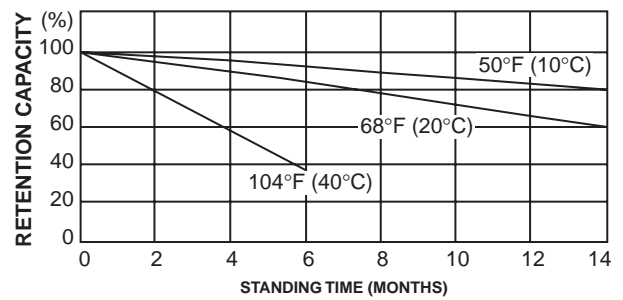
DISCHARGE CHARACTERISTICS



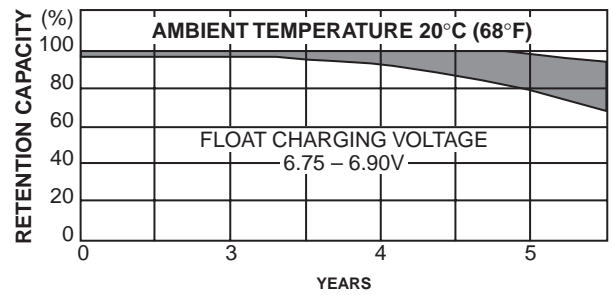
DISCHARGE TIME vs. DISCHARGE CURRENT



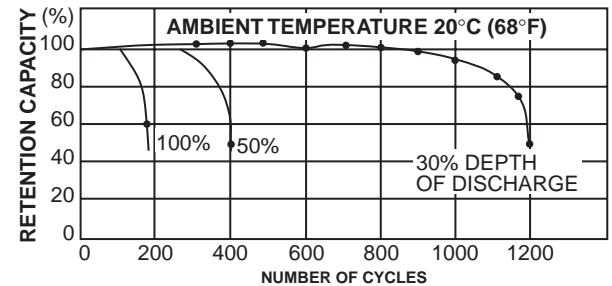
SHELF LIFE AND STORAGE



LIFE CHARACTERISTICS IN STAND-BY USE



LIFE CHARACTERISTICS IN CYCLIC USE



CHARGING

Cycle Applications: Limit initial current to 7200mA. Charge until battery voltage (under charge) reaches 7.20 to 7.35 volts at 68°F (20°C). Hold at 7.20 to 7.35 volts until current drops to approximately 360mA. Battery is fully charged under these conditions, and charger should either be disconnected or switched to "float" voltage.

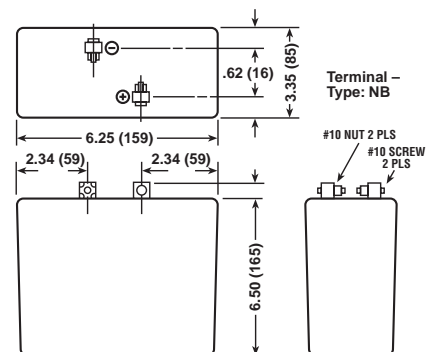
"Float" or "Stand-By" Service: Hold battery across constant voltage source of 6.75 to 6.90 volts continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

NOTE: Due to the self-discharge characteristics of this type of battery, it is imperative that they be charged after 6-9 months of storage, otherwise permanent loss of capacity might occur as a result of sulfation.

M-0567 Rev. 7-99

PHYSICAL DIMENSIONS

DIMENSIONS: Inches (mm)



Tolerances are ±0.05 in. (±1mm) and ±0.08 in. (±2mm) for height dimensions.



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