



**NP38-12B**  
**NP38-12R**

*Sealed Rechargeable  
Lead-Acid Battery*

**12V, 38Ah**

**Specifications**

- **NOMINAL VOLTAGE:** 12V
- **NOMINAL CAPACITY:**

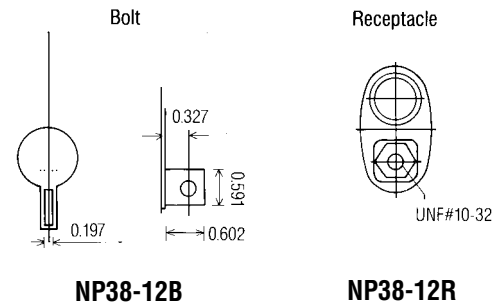
20 hr. rate of	1.9A to 10.5V	38.0Ah
10 hr. rate of	3.5A to 10.5V	35.0Ah
5 hr. rate of	6.46A to 10.2V	32.3Ah
1 hr. rate of	22.8A to 9.60V	22.8Ah
- **WEIGHT (approx.):** 30 pounds (13.8 kgs.)
- **ENERGY DENSITY (20 hr. rate):** 1.30 WH/cubic inch (82.8 WH/liter)
- **SPECIFIC ENERGY (20 hr. rate):** 14.9 WH/pound (67.8 WH/kg)
- **INTERNAL RESISTANCE OF CHARGED BATTERY:** 8 milliohms (approx.)
- **MAXIMUM DISCHARGE CURRENT WITH STANDARD TERMINALS:** 150 amperes
- **MAXIMUM SHORT-DURATION DISCHARGE CURRENT:** 500 amperes
- **OPERATING TEMPERATURE RANGE:**

CHARGE	5°F to 122°F
	(-15°C to 50°C)
DISCHARGE	-4°F to 140°F
	(-20°C to 60°C)
- **CHARGE RETENTION (shelf life) at 68°F (20°C):**

1 month	97%
3 months	91%
6 months	85%
- **LIFE EXPECTANCY:**

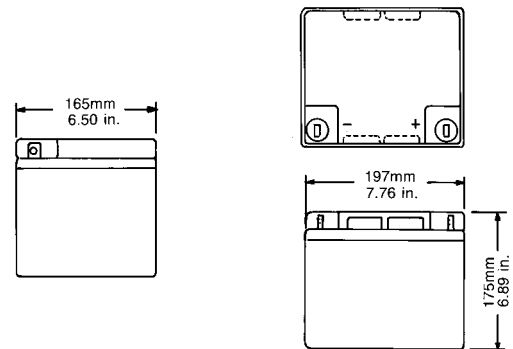
<b>STANDBY USE</b>	3 to 5 years
<b>CYCLE USE (approx.):</b>	
100% depth of discharge	250 cycles
50% depth of discharge	550 cycles
30% depth of discharge	1200 cycles
- **SEALED CONSTRUCTION:** Can be operated in any position without leakage.
- **STANDARD TERMINAL:** Bolt Terminal or Receptacle Terminal with Bolt
- **HOUSING MATERIAL:** Container and cover made from Flame Retardant ABS (UL94-V0/L.O.I.>28%)

**Terminal**



DIMENSIONS: INCHES

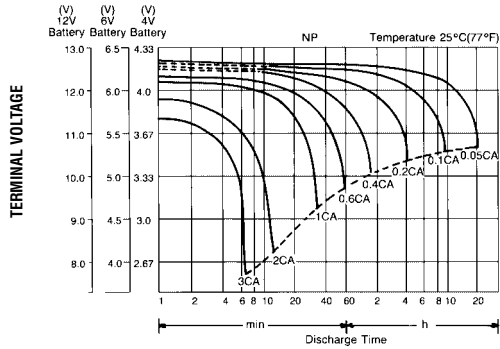
**Dimensions**



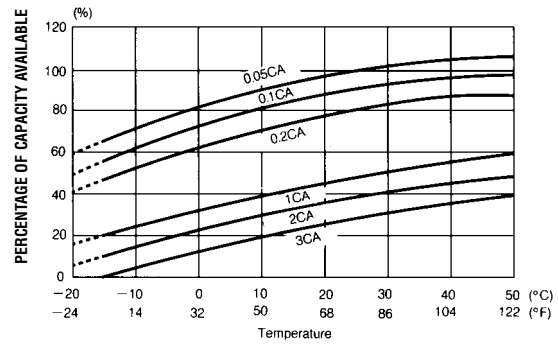
DIMENSIONS: MM (INCHES)



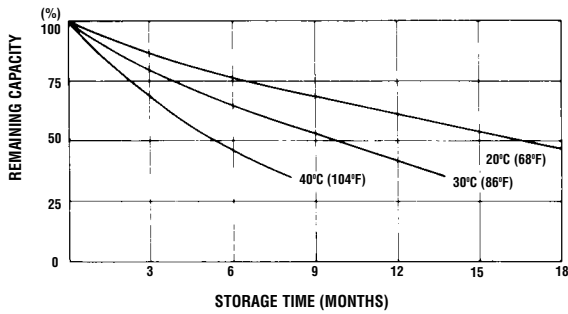
### DISCHARGE CHARACTERISTIC CURVES AT 25°C (77°F)



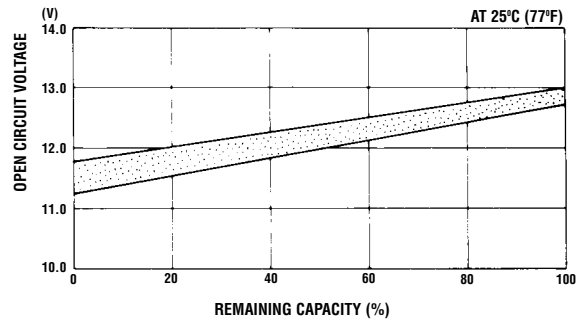
### TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY



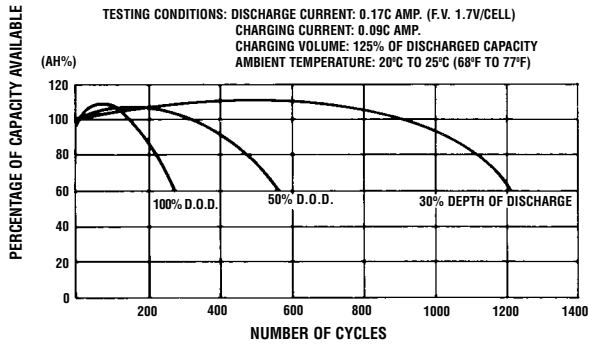
### SELF DISCHARGE CHARACTERISTICS



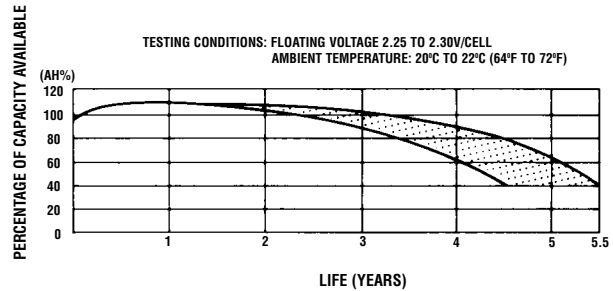
### OPEN CIRCUIT VOLTAGE VS REMAINING CAPACITY



### CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE



### FLOAT SERVICE LIFE



When the battery will be used by current in excess of 3C, consult with EnerSys, Inc. prior to use.

#### CHARGING METHODS (At 20°C)

**Cycle use:** Maximum charging current 9.5A  
 Charging voltage 14.4 to 15.0V  
**Standby use:** Float charging voltage 13.50 to 13.80V

**CAUTION**

- Avoid short circuit
- Do not charge in a sealed container.



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