



NP4-12 NP4-12FR

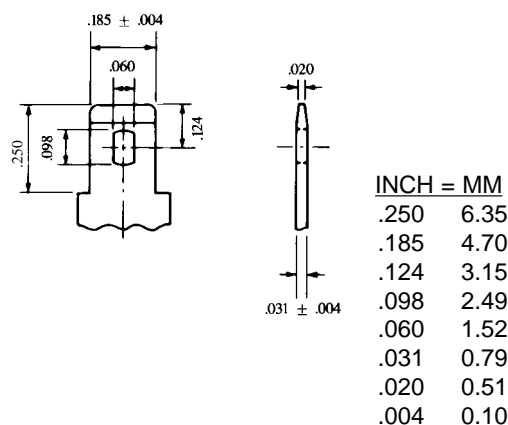
Sealed Rechargeable
Lead-Acid Battery

12V, 4.0Ah

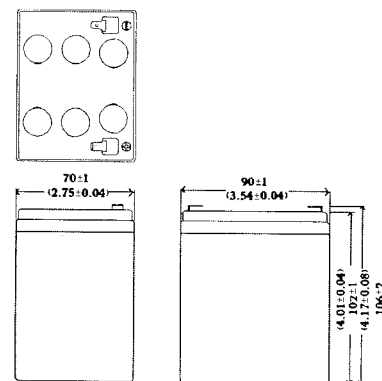
Specifications

- **NOMINAL VOLTAGE:** 12V
- **NOMINAL CAPACITY:**
 - 20 hr. rate of 0.20A to 10.5V 4.0Ah
 - 10 hr. rate of 0.37A to 10.5V 3.7Ah
 - 5 hr. rate of 0.68A to 10.2V 3.4Ah
 - 1 hr. rate of 2.40A to 9.60V 2.4Ah
- **WEIGHT (approx.):** 3.74 pounds (1.7 kgs.)
- **ENERGY DENSITY (20 hr. rate):** 1.23 WH/cubic inch (75.1 WH/liter)
- **SPECIFIC ENERGY (20 hr. rate):** 12.7 WH/pound (28.0 WH/kg)
- **INTERNAL RESISTANCE OF CHARGED BATTERY:** 40 milliohms (approx.)
- **MAXIMUM DISCHARGE CURRENT WITH STANDARD TERMINALS:** 40 amperes
- **MAXIMUM SHORT-DURATION DISCHARGE CURRENT:** 120 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:**
 - STANDBY USE 3 to 5 years
 - CYCLE USE (approx.):
 - 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:** Quick Disconnect .187 or Optional .250
- **HOUSING MATERIAL:** ABS Resin
- **OPTIONAL:** Container and cover made from Flame Retardant ABS (UL94-V0/L.O.I.>28%)

Terminal



Dimensions



DIMENSIONS: MM (INCHES)

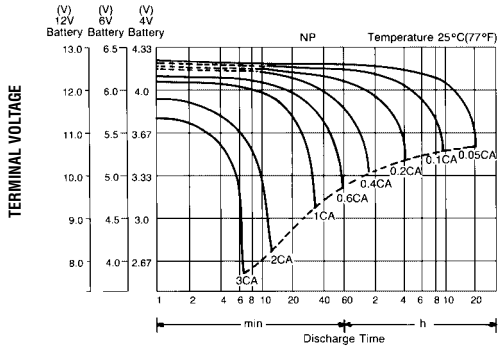
EnerSys™

Power/Full Solutions™

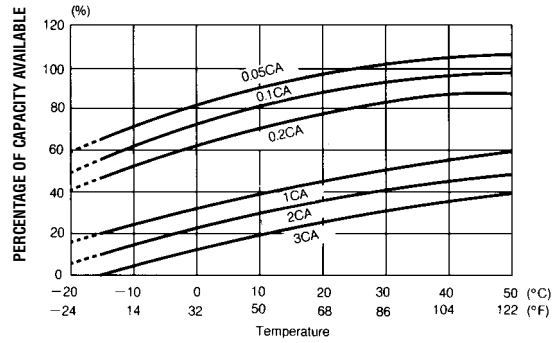


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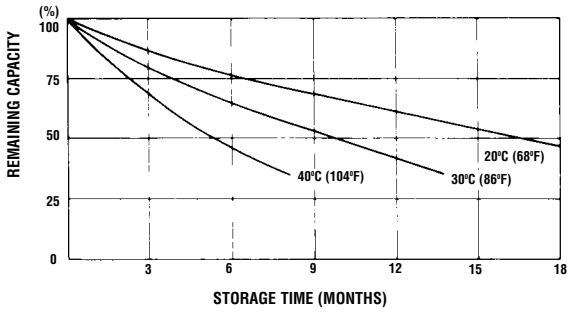
DISCHARGE CHARACTERISTIC CURVES AT 25°C (77°F)



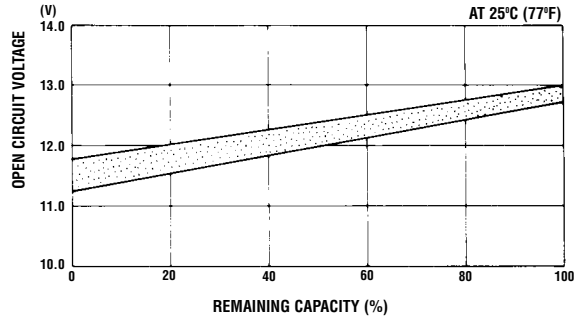
TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY



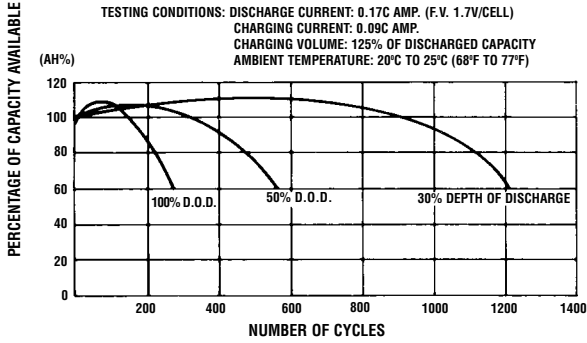
SELF DISCHARGE CHARACTERISTICS



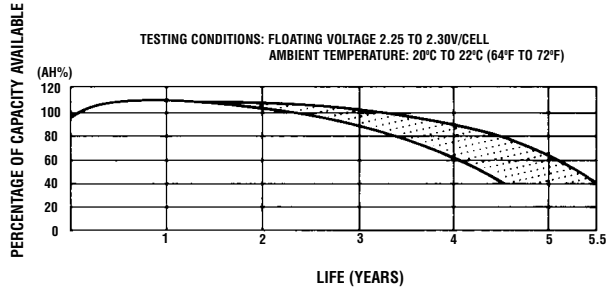
OPEN CIRCUIT VOLTAGE VS REMAINING CAPACITY



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 1.0A
 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.