



NP24-12R
NP24-12RFR

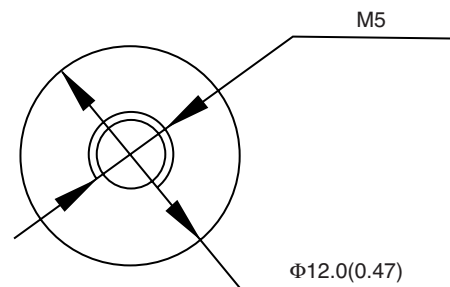
*Sealed Rechargeable
Lead-Acid Battery*

12V, 24Ah

Specifications

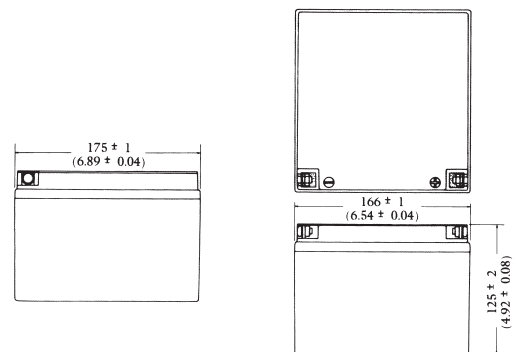
- **NOMINAL VOLTAGE:** 12V
- **NOMINAL CAPACITY:**
 - 20 hr. rate of 1.25A to 10.5V 25.0Ah
 - 10 hr. rate of 2.25A to 10.5V 22.5Ah
 - 5 hr. rate of 4.0A to 10.2V 20.0Ah
 - 1 hr. rate of 15.0A to 9.60V 15.0Ah
- **WEIGHT (approx.):** 19 pounds (8.8 Kg)
- **ENERGY DENSITY (20 hr. rate):** 1.35 WH/cubic inch (79 WH/liter)
- **SPECIFIC ENERGY (20 hr. rate):** 15.8 WH/pound (35 WH/Kg)
- **INTERNAL RESISTANCE OF CHARGED BATTERY:** 10 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:**
 - 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:** Receptacle M5
- **HOUSING MATERIAL:** ABS Resin
- **OPTIONAL:** Container and cover made from Flame Retardant ABS (UL94-V0/L.O.I.>28%)
- **HARDWARE:** 2-M5-.8 x 12mm Bolt w/ lock washer & flat washer

Terminal



DIMENSIONS: MM (INCHES)

Dimensions

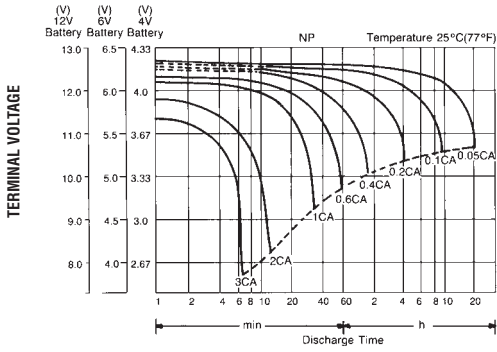


DIMENSIONS: MM (INCHES)

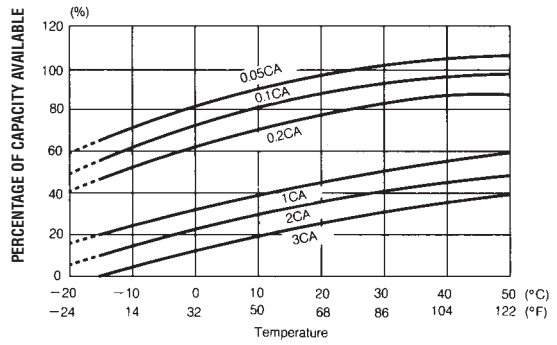
UL listing pending - File No MH16464



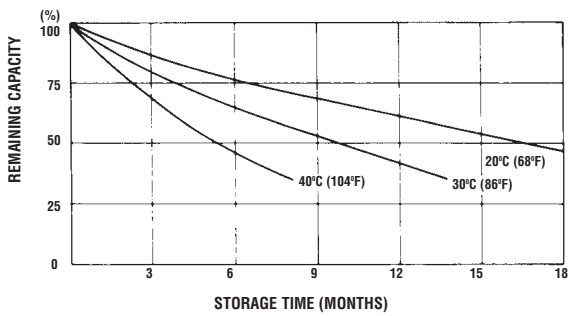
DISCHARGE CHARACTERISTIC CURVES AT 25°C (77°F)



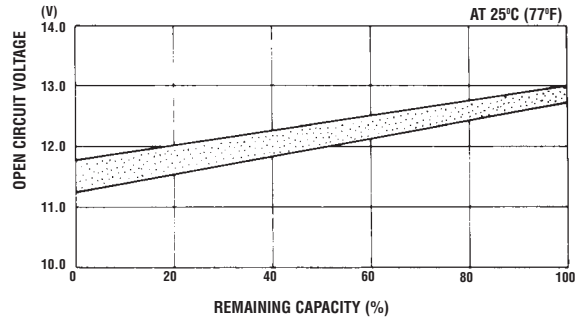
TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY



SELF DISCHARGE CHARACTERISTICS

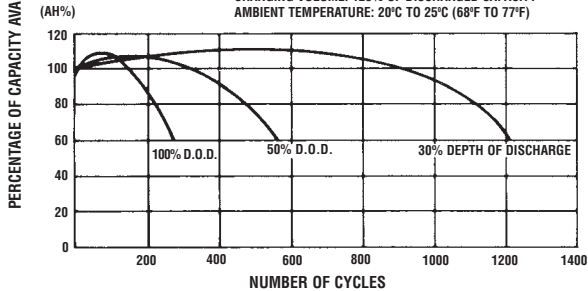


OPEN CIRCUIT VOLTAGE VS REMAINING CAPACITY



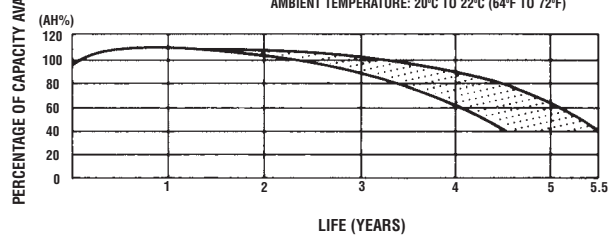
CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE

TESTING CONDITIONS: DISCHARGE CURRENT: 0.17C AMP. (F.V. 1.7V/CELL)
 CHARGING CURRENT: 0.09C AMP.
 CHARGING VOLUME: 125% OF DISCHARGED CAPACITY
 AMBIENT TEMPERATURE: 20°C TO 25°C (68°F TO 77°F)



FLOAT SERVICE LIFE

TESTING CONDITIONS: FLOATING VOLTAGE 2.25 TO 2.30V/CELL
 AMBIENT TEMPERATURE: 20°C TO 22°C (64°F TO 72°F)



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

CHARGING METHODS (At 20°C)

Cycle use: Maximum charging current 0.25C
 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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