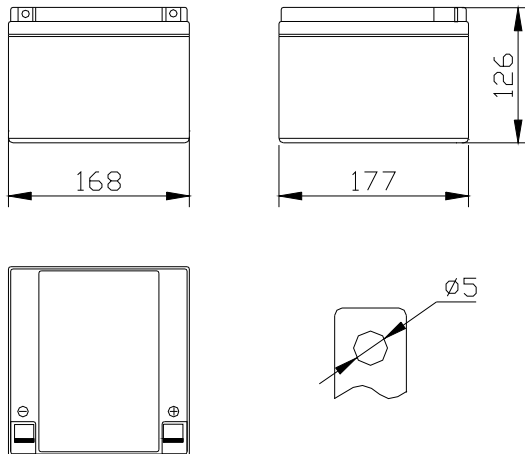


NPD12240 12V24AH

The battery is designed specially for electric vehicles, such as electric golf cart, electric wheelchair, mower dust collector etc. It has high cycling life, high efficiency and long service life.

Outer Dimensions



Dimensions and Weight

| | |
|---------------------------------|------------|
| Length (mm / inch)..... | 165 / 6.50 |
| Width (mm / inch) | 175 / 6.89 |
| Height (mm / inch) | 126 / 4.96 |
| Total Height (mm / inch)..... | 126 / 4.96 |
| Approx.Weight(Kg / lbs)..... | 9.10 /20.0 |

Performance Characteristics

| | |
|---|-----------|
| Nominal Voltage | 12V |
| Number of cell | 6 |
| Design Life | 3~5 years |
| Nominal Capacity 77°F (25°C) | |
| 5 hour rate (5.2A,10.5V) | 24.0Ah |
| 2 hour rate(10.8A,10.5V) | 21.6Ah |
| Internal Resistance | |
| Fully Charged battery 77°F (25°C) | 10mOhms |
| Self-Discharge | |
| 3% of capacity declined per month at 25°C (average) | |
| Operation Temperature Range | |
| Discharge | -20~60°C |
| Charge | -10~60°C |
| Storage | -20~60°C |
| Max.Discharge Current 77°F (25°C) | 390A(5s) |
| Short Circuit Current | 1200A |

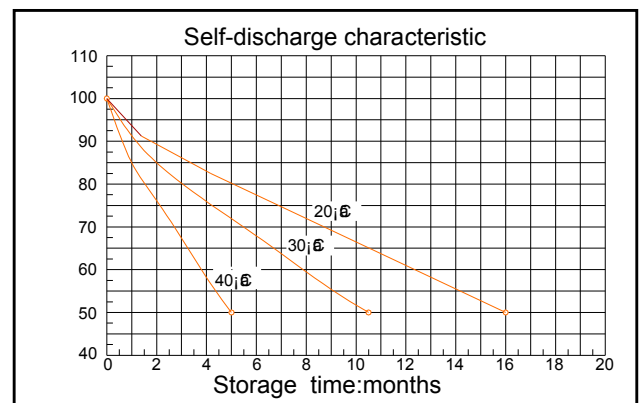
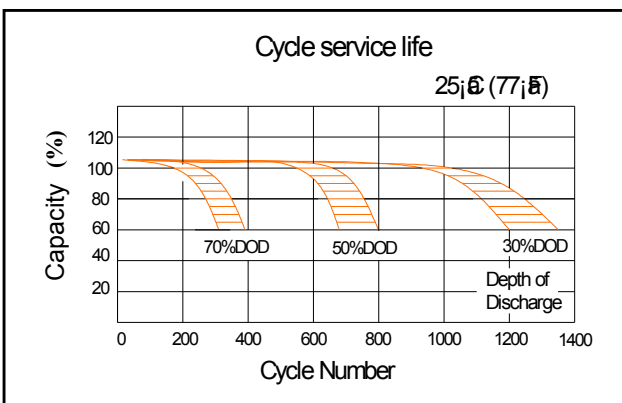
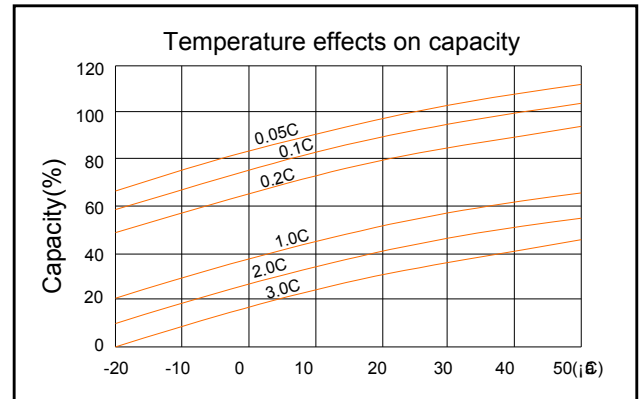
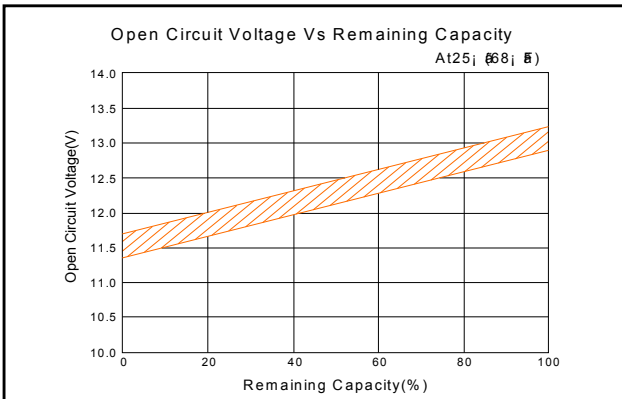
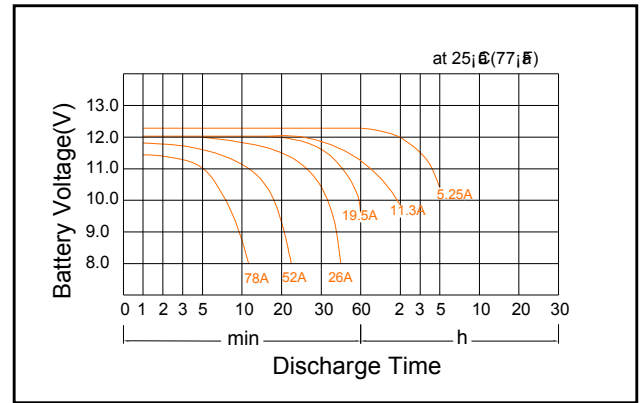
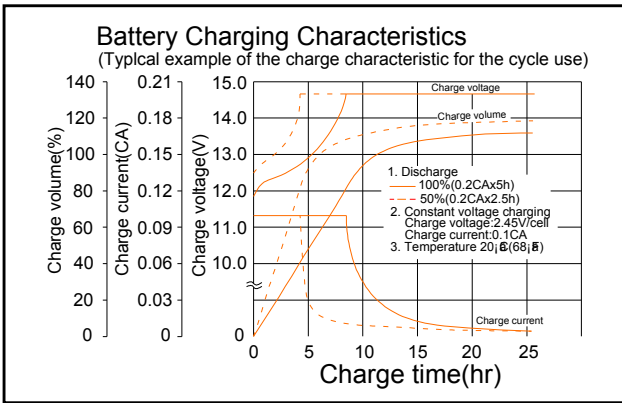
Battery Construction

| Component | Positive plate | Negative plate | Container | Cover | Safety valve | Terminal | Separator | Electrolyte |
|--------------|----------------|----------------|-----------|-------|--------------|----------|------------|---------------|
| Raw material | Lead dioxide | Lead | ABS | ABS | Rubber | Copper | Fiberglass | Sulfuric acid |

Charging Methods

| Application | Charging method | Charging Voltage at 25°C | Temperature compensation coefficient of charging voltage | Max.charging current | Charging time 25°C (h) | | Temp (°C) |
|--------------------------|---|---|--|----------------------|------------------------|---------------|-----------------|
| | | | | | 100% discharge | 50% discharge | |
| For standby power source | Constant voltage & Constant Current Charging (with current restriction) | 13.8~14.1V | -20 mV/°C | 12.0A | 20 | 16 | 0~40 (32~104°F) |
| For cycle service | | 14.6~15.0V | -30 mV/°C | 12.0A | 16 | 10 | |
| For cycle service | | Several -step Constant Current Charging | 14.6~15.0V | ----- | 12.0A | 10 | |

*Temperature compensation of charging voltage is not needed when using the batteries within 15°C to 35°C range.



Discharge Constant Current (Amperes at 77°F/25°C)

| F.V / Time | 10 Min | 15 Min | 30 Min | 45Min | 1 h | 2 h | 3 h | 5 h | 10 h |
|------------|--------|--------|--------|-------|------|------|------|------|------|
| 10.80V | 65.0 | 49.4 | 30.1 | 21.2 | 18.2 | 10.6 | 7.59 | 5.15 | 2.60 |
| 10.50V | 69.4 | 51.5 | 31.4 | 21.7 | 18.6 | 10.8 | 7.75 | 5.20 | 2.68 |
| 10.20V | 73.6 | 53.3 | 32.0 | 22.2 | 19.1 | 11.1 | 7.80 | 5.25 | 2.73 |
| 9.90V | 75.9 | 54.4 | 32.5 | 22.5 | 19.3 | 11.3 | 7.85 | 5.28 | 2.81 |
| 9.60V | 78.0 | 55.4 | 33.0 | 22.8 | 19.5 | 11.5 | 7.85 | 5.31 | 2.81 |

Discharge Constant Power (Watts/ at 77°F/25°C)

| F.V / Time | 10 Min | 15 Min | 30 Min | 45Min | 1 h | 2 h | 3 h | 5 h | 10 h |
|------------|--------|--------|--------|-------|-----|-----|------|------|------|
| 10.80V | 750 | 571 | 350 | 247 | 213 | 125 | 89.6 | 60.9 | 31.0 |
| 10.50V | 791 | 587 | 356 | 251 | 216 | 126 | 90.2 | 61.0 | 31.6 |
| 10.20V | 823 | 597 | 359 | 251 | 217 | 126 | 90.4 | 61.2 | 32.1 |
| 9.90V | 831 | 598 | 360 | 251 | 217 | 127 | 90.4 | 61.3 | 32.4 |
| 9.60V | 837 | 603 | 362 | 252 | 219 | 127 | 87.9 | 61.3 | 32.6 |

Newton Power

Deep Cycle Batteries

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