



# AGM LEAD ACID BATTERY

## 18-12 General Purpose M5-F



### MAIN INFORMATION / INFORMATIONS GÉNÉRALES

|                                                                     |                            |
|---------------------------------------------------------------------|----------------------------|
| <b>BRAND / MARQUE</b>                                               | NX                         |
| <b>TECHNOLOGY / TECHNOLOGIE</b>                                     | AGM Lead acid              |
| <b>NOMINAL VOLTAGE / TENSION NOMINALE</b>                           | 12V                        |
| <b>NOMINAL CAPACITY / CAPACITÉ NOMINALE</b>                         | 18Ah (20hr)                |
| <b>DIMENSIONS / DIMENSIONS</b>                                      |                            |
| • <b>Length / Longueur</b>                                          | 181.5 ± 2mm (5.95 inches)  |
| • <b>Width / Largeur</b>                                            | 77 ± 1mm (2.56 inches)     |
| • <b>Height / Hauteur</b>                                           | 167.5 ± 1mm (3.68 inches)  |
| • <b>Total height with terminals / Hauteur totale (avec cosses)</b> | 167.5 ± 1mm (3.90 inches)  |
| <b>WEIGHT (± 4 %) / POIDS (± 4 %)</b>                               | Approx 5.4 kg (11.9lbs)    |
| <b>TERMINAL / TYPE DE COSSES</b>                                    | M5-F = M5 FEMALE           |
| <b>CASING / TYPE DE BAC</b>                                         | UL94 V-0 (Flame retardant) |
| <b>COLOR / COULEUR DE BAC</b>                                       | Black top and black case   |

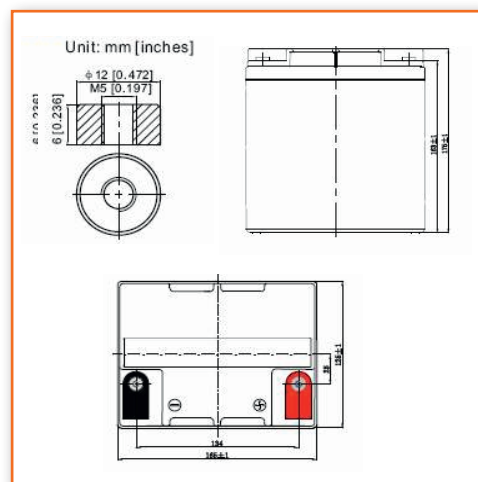


### TECHNICAL INFORMATION / INFORMATIONS TECHNIQUES

|                                                                  |                                                                                                                                                                                                                                           |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CAPACITY / CAPACITÉ</b>                                       | 18.0Ah / 1.20A (20hr, 1.80V/cell, 25°C/77°F)<br>16.7Ah / 2.23A (20hr, 1.80V/cell, 25°C/77°F)<br>15.1Ah / 4.08A (5hr, 1.75V/cell, 25°C/77°F)<br>13.5Ah / 6.12A (5hr, 1.75V/cell, 25°C/77°F)<br>11.1Ah / 15.1A (1hr, 1.60V/cell, 25°C/77°F) |
| <b>DISCHARGE CURRENT / COURANT DE DÉCHARGE</b>                   | 270A (5s)                                                                                                                                                                                                                                 |
| <b>INTERNAL RESISTANCE / RÉSISTANCE INTERNE</b>                  | Approx 16mΩ                                                                                                                                                                                                                               |
| <b>OPERATING TEMPERATURE RANGE / PLAGES DE TEMPÉRATURE</b>       |                                                                                                                                                                                                                                           |
| • <b>Discharging / Décharge</b>                                  | -15°~50°C (5 ~122°F)                                                                                                                                                                                                                      |
| • <b>Charging / Charge</b>                                       | 0°~40°C (32 ~104°F)                                                                                                                                                                                                                       |
| • <b>Storage / Stockage</b>                                      | -15°~40°C (5 ~104°F)                                                                                                                                                                                                                      |
| <b>NOMINAL OPERATING TEMPERATURE / TEMPÉRATURE D'UTILISATION</b> | 25 ± 3°C (77 ± 5°F)                                                                                                                                                                                                                       |
| <b>CAPACITY VS TEMPERATURE / CAPACITÉ SELON LA TEMPÉRATURE</b>   | 40°C (104°F) 103%<br>25°C (77°F) 100%<br>0°C (32°F) 86%                                                                                                                                                                                   |

#### Terminal

Unité : mm / Unit: inches



### APPLICATIONS

**All purpose / Tout usage**  
**UPS / Onduleur**  
**Emergency light / Éclairage de secours**  
**Railway signal / Signalisation ferroviaire**  
**Alarm and security system / Alarme et sécurité**

**Aircraft signal / Signal d'avion**  
**Electronic devices and equipment / Appareils et équipements électroniques**  
**Emergency backup / Alimentation de secours**  
**Power supply / Réserve d'énergie**

|                                                                                                                    |                                       |
|--------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>TMD 1 Description, classe : UN 2800 – accumulateurs inversables remplis d'électrolyte liquide, 8, none, (E)</b> |                                       |
| <b>ADR : Not regulated</b>                                                                                         | <b>IMDG Not regulated</b>             |
| <b>IATA : Exempt</b>                                                                                               | <b>Procédure TMD PROC 2 : UN 2800</b> |



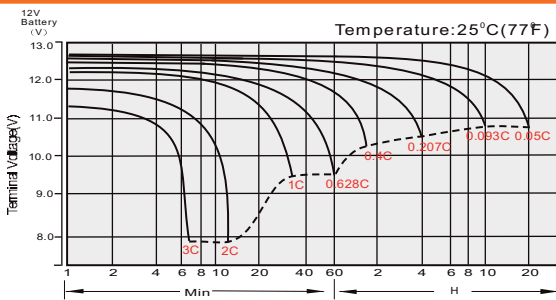
**CONSTANT CURRENT DISCHARGE (AMPERES) AT 25°C**  
**TABLE DE DÉCHARGE À COURANT ET PUISSANCE CONSTANTS (A) À 25°C**

| F.V/Temps  | 5min | 10min | 15min | 20min | 30min | 45min | 1h   | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h   |
|------------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-------|
| 1.85V/cell | 33.9 | 25.6  | 22.7  | 19.7  | 15.3  | 11.4  | 9.11 | 5.51 | 4.13 | 3.35 | 2.84 | 2.47 | 1.96 | 1.63 | 0.884 |
| 1.80V/cell | 40.8 | 30.2  | 25.9  | 22.1  | 16.7  | 12.2  | 9.79 | 5.85 | 4.34 | 3.51 | 2.94 | 2.55 | 2.02 | 1.67 | 0.900 |
| 1.75V/cell | 45.8 | 33.0  | 27.8  | 23.4  | 17.4  | 12.8  | 10.2 | 6.07 | 4.49 | 3.60 | 3.03 | 2.62 | 2.06 | 1.70 | 0.918 |
| 1.70V/cell | 49.9 | 35.4  | 29.7  | 24.7  | 18.1  | 13.2  | 10.6 | 6.27 | 4.63 | 3.69 | 3.09 | 2.67 | 2.09 | 1.72 | 0.929 |
| 1.65V/cell | 53.8 | 37.7  | 31.1  | 25.8  | 18.9  | 13.8  | 10.9 | 6.44 | 4.73 | 3.77 | 3.14 | 2.71 | 2.12 | 1.74 | 0.938 |
| 1.60V/cell | 57.9 | 39.6  | 31.1  | 26.4  | 19.3  | 14.0  | 11.1 | 6.59 | 4.82 | 3.84 | 3.20 | 2.74 | 2.15 | 1.76 | 0.945 |

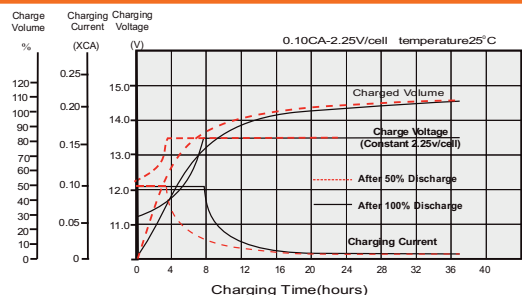
**CONSTANT POWER DISCHARGE (WATTS) AT 25°C**  
**DÉCHARGE À PUISSANCE CONSTANTE (WATTS) À 25°C**

| F.V/Temps  | 5min  | 10min | 15min | 20min | 30min | 45min | 1h   | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 64.0  | 48.8  | 43.6  | 38.5  | 29.8  | 22.3  | 17.9 | 10.9 | 8.21 | 6.68 | 5.68 | 4.95 | 3.95 | 3.29 | 1.79 |
| 1.80V/cell | 76.3  | 57.2  | 49.5  | 42.7  | 32.4  | 23.9  | 19.2 | 11.5 | 8.59 | 6.98 | 5.86 | 5.09 | 4.04 | 3.36 | 1.81 |
| 1.75V/cell | 84.8  | 62.0  | 52.8  | 44.8  | 33.6  | 24.9  | 20.0 | 11.9 | 8.87 | 7.14 | 6.02 | 5.21 | 4.11 | 3.39 | 1.82 |
| 1.70V/cell | 91.1  | 65.6  | 55.7  | 46.8  | 34.7  | 25.6  | 20.6 | 12.2 | 9.06 | 7.25 | 6.08 | 5.27 | 4.15 | 3.42 | 1.83 |
| 1.65V/cell | 96.6  | 68.8  | 57.5  | 48.4  | 35.8  | 26.3  | 21.0 | 12.5 | 9.19 | 7.35 | 6.15 | 5.32 | 4.18 | 3.43 | 1.84 |
| 1.60V/cell | 101.5 | 70.8  | 58.0  | 48.7  | 36.0  | 26.5  | 21.3 | 12.7 | 9.31 | 7.45 | 6.22 | 5.33 | 4.21 | 3.45 | 1.85 |

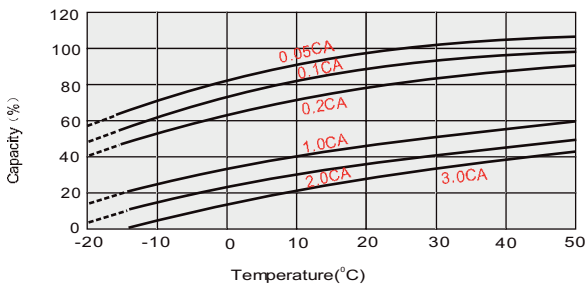
**DISCHARGE CHARACTERISTICS**  
**CARACTÉRISTIQUES DE DÉCHARGE**



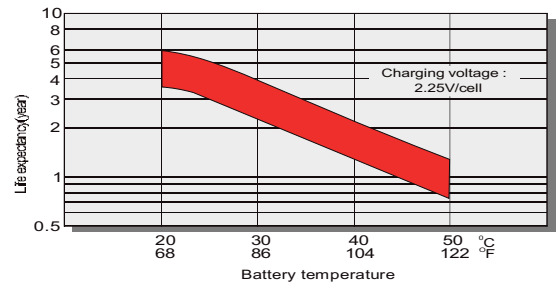
**FLOAT CHARGING CHARACTERISTICS**  
**CARACTÉRISTIQUES DE CHARGE EN FLOATING**



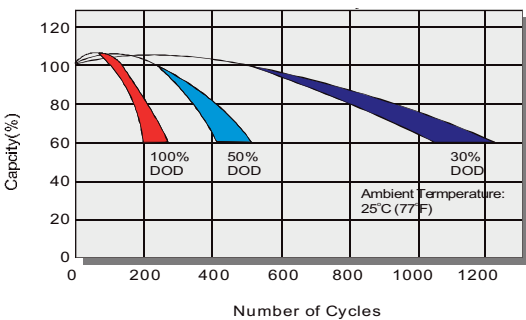
**TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY**  
**EFFET DE LA TEMPÉRATURE SUR LA BATTERIE**



**EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE**  
**EFFET DE LA TEMPÉRATURE SUR LA DURÉE DE VIE EN FLOATING**



**CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE**  
**CYCLE DE VIE EN FONCTION DE LA PROFONDEUR DE LA DÉCHARGE**



**SELF DISCHARGE CHARACTERISTICS**  
**RELATION ENTRE LA CAPACITÉ ET LE TEMPS DE STOCKAGE**

