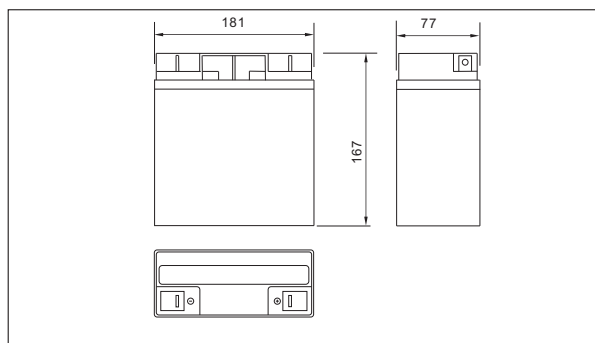


## NP12-18(12V18AH)



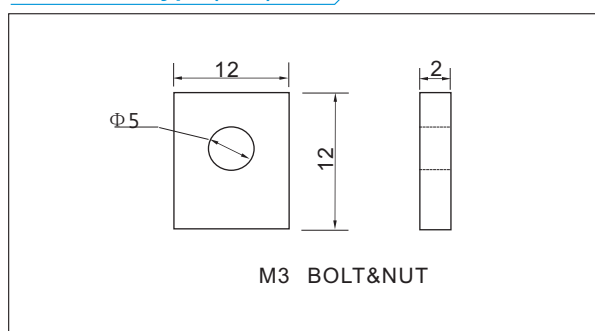
### Outer dimensions (mm)



### Specifications

|                               |              |                      |
|-------------------------------|--------------|----------------------|
| Nominal Voltage               |              | 12V                  |
| Rated capacity (20 hour rate) |              | 18Ah                 |
| Dimensions                    | Total Height | 167 mm (6.57 inches) |
|                               | Height       | 167 mm (6.57 inches) |
|                               | Length       | 181 mm (7.13 inches) |
|                               | Width        | 77 mm (3.03 inches)  |
| Weight Approx                 |              | 5.0Kg (11.0lbs)      |

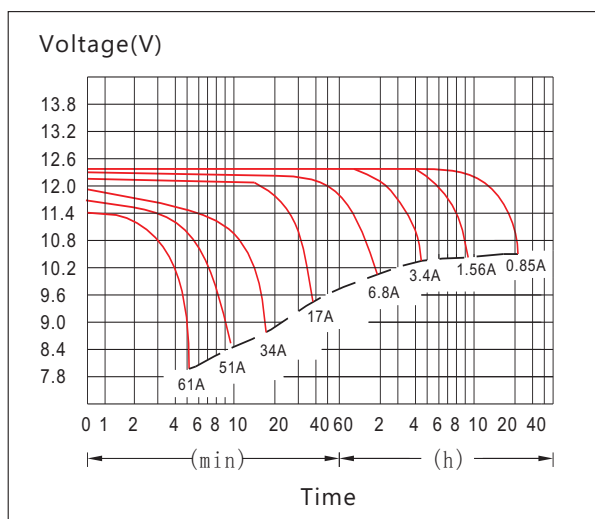
### Terminal Type (mm)



### Characteristics

|  |                                    |  |
|--|------------------------------------|--|
| Capacity<br>25°C(77°F)                         | 20 hour rate(0.90 A)               | 18.0 AH  |
|  | 10 hour rate(1.56 A)               | 15.6 AH  |
|  | 5 hour rate(2.90A)                 | 14.5AH   |
|  | 1 hour rate(10.2 A)                | 10.2AH   |
|  | 1.5 hour discharge to 10.5V        | 6.8A   |
| Internal Resistance                            | Full charged Battery at 25°C(77°F) | 16.5mΩ   |
| Capacity affected by Temperature (20hour rate) | 40°C(104°F)                        | 102%   |
|  | 25°C(77°F)                         | 100%   |
|  | 0°C(32°F)                          | 85%  |
|  | -15°C(5°F)                         | 65%  |
| Self-Discharge at 25°C(77°F)                   | Capacity after 3 month storage     | 91%  |
|  | Capacity after 6 month storage     | 82%  |
|  | Capacity after 12 month storage    | 64%  |
| Terminal                                       |                                    | T3   |
| Charge (constant Voltage)                      | Cycle                              | Initial Charging Current less than6.8A<br>Voltage 14.40-15.00V Time 14~16h |
|  | Float                              | Voltage 13.50-13.80V   |

### Discharge Curves 25°C(77°F)



Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

| Time   |   | 5min | 10min | 15min | 30min | 1h   | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
|--------|---|------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 9.60V  | A | 61.2 | 40.1  | 29.8  | 19.6  | 10.2 | 5.95 | 4.38 | 3.51 | 2.98 | 1.97 | 1.61 | 0.88 |
|        | W | 635  | 431   | 319   | 210   | 110  | 65.3 | 48.7 | 39.5 | 33.9 | 22.6 | 18.6 | 10.2 |
| 10.20V | A | 56.1 | 38.4  | 27.3  | 18.6  | 9.58 | 5.71 | 4.25 | 3.40 | 2.93 | 1.93 | 1.58 | 0.86 |
|        | W | 603  | 429   | 306   | 208   | 108  | 65.8 | 49.2 | 39.5 | 34.1 | 22.6 | 18.6 | 10.1 |
| 10.50V | A | 51.1 | 35.9  | 25.5  | 18.0  | 9.27 | 5.60 | 4.18 | 3.23 | 2.89 | 1.91 | 1.56 | 0.85 |
|        | W | 561  | 408   | 291   | 207   | 107  | 64.9 | 48.7 | 37.8 | 33.9 | 22.5 | 18.5 | 10.0 |
| 10.80V | A | 49.1 | 34.3  | 23.8  | 17.5  | 8.95 | 5.45 | 4.11 | 3.17 | 2.76 | 1.86 | 1.52 | 0.83 |
|        | W | 551  | 395   | 274   | 203   | 104  | 63.9 | 48.4 | 37.5 | 32.7 | 22.1 | 18.1 | 9.87 |
| 11.10V | A | 45.4 | 32.3  | 22.1  | 17.0  | 8.64 | 5.31 | 3.90 | 3.12 | 2.64 | 1.81 | 1.49 | 0.81 |
|        | W | 515  | 374   | 257   | 199   | 102  | 62.8 | 46.3 | 37.1 | 31.5 | 21.7 | 18.0 | 9.79 |

NOTE: FOR REFERENCE ONLY