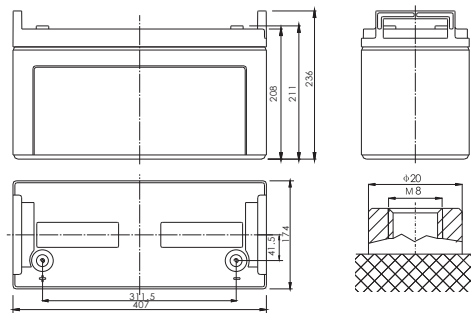


## BG Series Battery For General Use TLBG12120A



Batteries come standard with a special tray



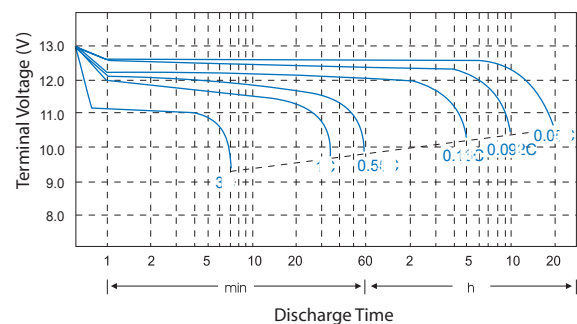
### Specifications

|                              |                               |                             |
|------------------------------|-------------------------------|-----------------------------|
| Nominal Voltage              |                               | 12V                         |
| Rated Capacity(10 hour rate) |                               | 120Ah                       |
| Dimensions                   | Total Height (with terminals) | 9.29 inches(236mm)          |
|                              | Height                        | 8.19 inches(208mm)          |
|                              | Length                        | 16.02 inches(407mm)         |
|                              | Width                         | 6.85 inches(174mm)          |
| Weight                       |                               | Approx. 75.90 Pound(34.5kg) |

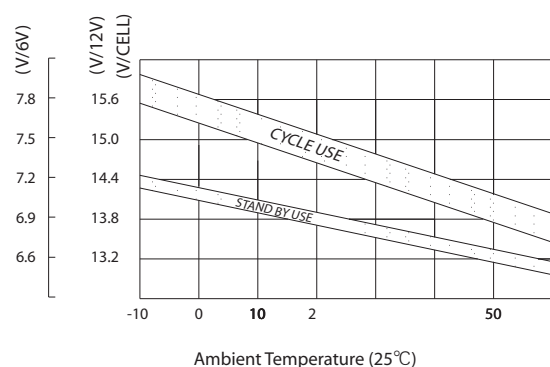
### Characteristics

|                                                    |                                  |                                                                                                        |
|----------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------|
| Capacity<br>77°F(25°C)                             | 10 hour rate (12A)               | 120Ah                                                                                                  |
|                                                    | 5 hour rate (19.2A)              | 96Ah                                                                                                   |
|                                                    | 1 hour rate (72A)                | 72Ah                                                                                                   |
|                                                    | 15 minute rate (197)             | 49.2Ah                                                                                                 |
| Internal Resistance                                | Full Charged Battery 77°F(25°C)  | 4.0 mΩ                                                                                                 |
| Capacity Affected by<br>Temperature (20 hour rate) | 104°F(40°C)                      | 102%                                                                                                   |
|                                                    | 77°F(25°C)                       | 100%                                                                                                   |
|                                                    | 32°F(0°C)                        | 85%                                                                                                    |
|                                                    | 5°F(-15°C)                       | 65%                                                                                                    |
| Self-Discharge<br>77°F(25°C)                       | Capacity after 3 months storage  | 91%                                                                                                    |
|                                                    | Capacity after 6 months storage  | 81%                                                                                                    |
|                                                    | Capacity after 12 months storage | 60%                                                                                                    |
| Max. Discharge<br>Current 77°F(25°C)               | 960A(5S)                         |                                                                                                        |
| Terminal                                           | T3                               |                                                                                                        |
| Charge<br>(Constant Voltage)                       | Cycle                            | Initial Charging Current Less than 36A                                                                 |
|                                                    |                                  | Voltage 14.1 V / 77 °F (25 °C)<br>Equalization temperature compensation coefficient: -24MV / °C        |
|                                                    | Float                            | Voltage 13.5V / 77 °F (25 °C)<br>Compensation coefficient of floating charging temperature: -18MV / °C |
|                                                    |                                  |                                                                                                        |

### Discharge Curves 77°F (25°C)



### Relationship Between Charge Voltage and Temperature



The operating environment temperature above 40°C should be avoided ,After long time storage, The battery actual capacity would be less than the rated capacity. Full capacity will be obtained through several charge/discharge cycles.  
To get the longest life, Technoline battery should be fully charged before storage.

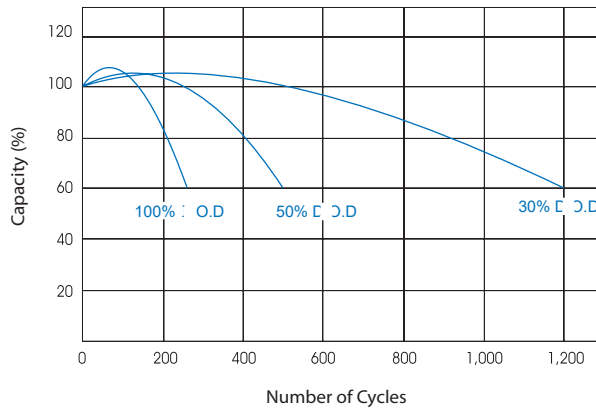
### Constant Current Discharge (Amperes @25 °C )

| FV/Tme | 10Min | 15Min | 30Min | 60Min | 2H   | 3H   | 4H   | 5H   | 8H   | 10H  | 20H  |
|--------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 1.60   | 271   | 197   | 127   | 76.1  | 44.2 | 31.7 | 24.8 | 21.3 | 14.6 | 12.9 | 7.10 |
| 1.65   | 261   | 189   | 122   | 73.2  | 42.5 | 31.6 | 24.5 | 21.2 | 14.5 | 12.8 | 7.04 |
| 1.70   | 246   | 182   | 104   | 73.1  | 41.9 | 31.5 | 23.6 | 21.0 | 14.1 | 12.6 | 6.93 |
| 1.75   | 215   | 172   | 97.9  | 72.0  | 41.7 | 31.2 | 22.9 | 20.3 | 13.9 | 12.5 | 6.88 |
| 1.80   | 207   | 165   | 94.1  | 69.2  | 40.1 | 30.0 | 22.0 | 19.2 | 13.4 | 12.0 | 6.60 |
| 1.85   | 170   | 144   | 86.6  | 63.7  | 38.5 | 29.4 | 20.9 | 18.5 | 12.7 | 11.6 | 6.38 |

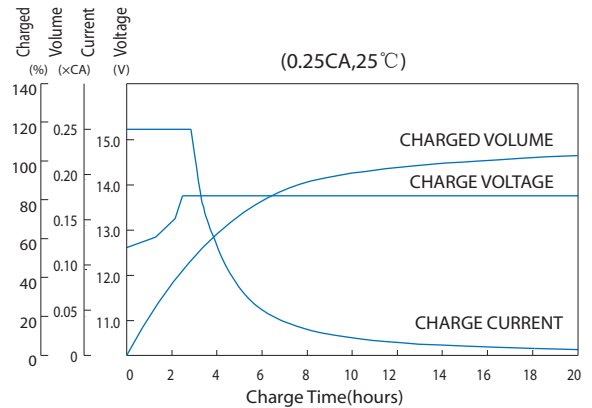
## ■ Constant Power Discharge (Watts Per Cell@25 °C )

| FV/Time | 10Min | 15Min | 30Min | 60Min | 2H   | 3H   | 4H   | 5H   | 8H   | 10H  | 20H  |
|---------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 1.60    | 473   | 368   | 229   | 143   | 84.0 | 58.9 | 46.5 | 38.9 | 27.5 | 24.5 | 13.5 |
| 1.65    | 467   | 365   | 222   | 138   | 82.9 | 58.8 | 46.3 | 38.6 | 27.4 | 24.3 | 13.4 |
| 1.70    | 455   | 349   | 194   | 133   | 82.1 | 57.2 | 45.2 | 37.9 | 26.8 | 23.9 | 13.2 |
| 1.75    | 415   | 329   | 187   | 130   | 81.5 | 55.7 | 44.1 | 37.2 | 26.0 | 23.8 | 13.1 |
| 1.80    | 396   | 317   | 181   | 128   | 79.9 | 55.3 | 43.7 | 36.6 | 25.7 | 22.8 | 12.5 |
| 1.85    | 328   | 277   | 169   | 125   | 77.0 | 54.0 | 42.5 | 35.4 | 24.1 | 21.8 | 12.0 |

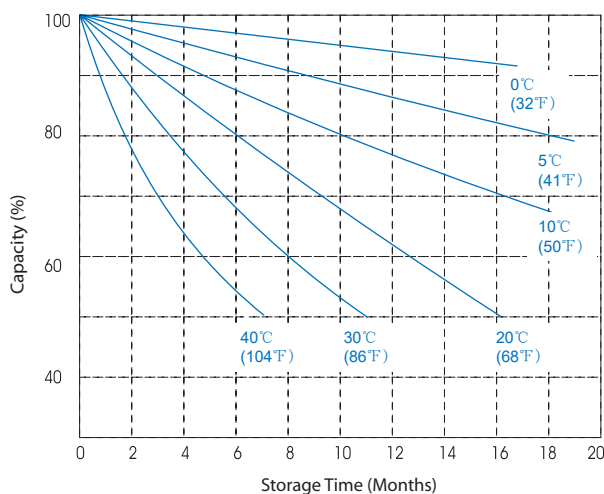
## ■ Cycle Service Life in Relation to Depth of Discharge



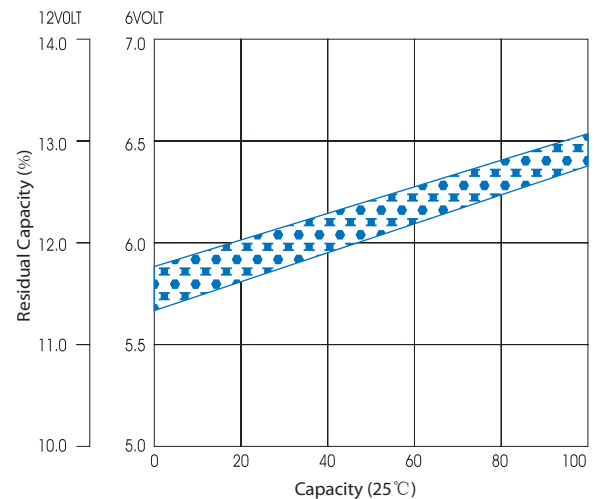
## ■ Constant Voltage Charge Characteristic



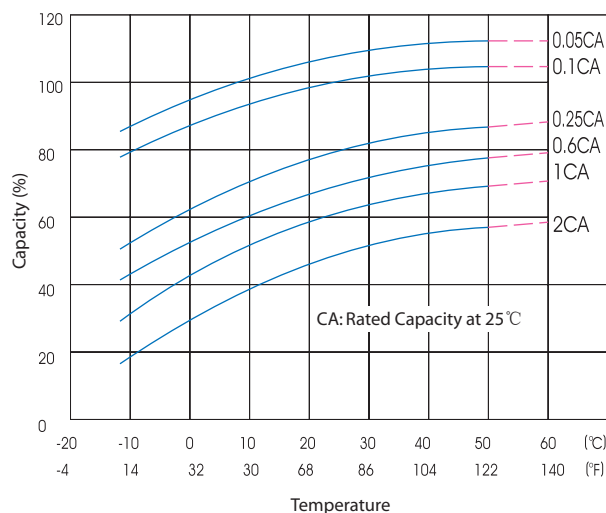
## ■ Self-Discharge Characteristics



## ■ Relationship of OCV and Residual Capacity % (25°C)



## ■ Temperature Effects on Capacity



## ■ Temperature Effects Float Life

