

### Specifications

|                                  |                                                                                                                                                                                       |                               |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Nominal Voltage                  | 12V                                                                                                                                                                                   |                               |
| Nominal Capacity (20HR)          | 0.8AH                                                                                                                                                                                 |                               |
| Dimension                        | Length                                                                                                                                                                                | 96mm (3.78 inches)            |
|                                  | Width                                                                                                                                                                                 | 25mm (0.98 inches)            |
|                                  | Height                                                                                                                                                                                | 62mm (2.44 inches)            |
|                                  | Total Height (with Terminal)                                                                                                                                                          | 62mm (2.44 inches)            |
|                                  |                                                                                                                                                                                       |                               |
| Approximate Weight               | 0.40 kg (0.88 lbs)                                                                                                                                                                    |                               |
| Battery Type                     | Valve Regulated Lead-Acid Battery, AGM Design                                                                                                                                         |                               |
| Terminal Type                    | WL (7720BT AMP Connector)                                                                                                                                                             |                               |
| Rated Capacity                   | 0.80AH                                                                                                                                                                                | (20hr, 1.75V/cell, 25°C/77°F) |
|                                  | 0.76AH                                                                                                                                                                                | (10hr, 1.75V/cell, 25°C/77°F) |
|                                  | 0.68AH                                                                                                                                                                                | (5hr, 1.75V/cell, 25°C/77°F)  |
|                                  | 0.67AH                                                                                                                                                                                | (3hr, 1.60V/cell, 25°C/77°F)  |
|                                  | 0.50AH                                                                                                                                                                                | (1hr, 1.60V/cell, 25°C/77°F)  |
| Max. Discharge Current (5s)      | 10.5A                                                                                                                                                                                 |                               |
| Internal Resistance (1 KHz)      | 125mΩ                                                                                                                                                                                 |                               |
| Operating Temp. Range            | Discharge:                                                                                                                                                                            | -20°C(-4°F)~50°C (122°F)      |
|                                  | Charge:                                                                                                                                                                               | -20°C(-4°F)~50°C (122°F)      |
|                                  | Storage:                                                                                                                                                                              | -20°C(-4°F)~40°C (104°F)      |
| Nominal Operating Temp. Range    | 25±3°C (77±5°F)                                                                                                                                                                       |                               |
| Container Material               | ABS (Option: 94-HB & 94-V0 flame retardant case)                                                                                                                                      |                               |
| Capacity affected by Temperature | 40°C (104°F)                                                                                                                                                                          | 103%                          |
|                                  | 25°C (77°F)                                                                                                                                                                           | 100%                          |
|                                  | 0°C (32°F)                                                                                                                                                                            | 86%                           |
| Self Discharge                   | SigmasTek SP series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is recommended. For higher temperatures the time interval will be shorter. |                               |



### Applications

- Uninterruptible Power Supply (UPS)
- Electric wheelchairs, scooters, bikes
- Electronic apparatus and equipment
- Alarm and security systems
- Emergency first responder equipment
- Emergency lighting
- Medical devices
- Electric carts
- Telecom equipment
- Switchgear
- Solar power systems



### Constant Current Discharge (Amperes Per Battery) at 25°C (77°F)

| F.V.<br>(V/cell) | Discharge<br>Time | 5min | 10min | 15min | 30min | 1h    | 2h    | 3h    | 5h    | 8h    | 10h   | 20h   |
|------------------|-------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V            |                   | 3.09 | 2.10  | 1.55  | 0.92  | 0.502 | 0.292 | 0.225 | 0.148 | 0.097 | 0.080 | 0.042 |
| 1.65V            |                   | 2.80 | 1.93  | 1.45  | 0.87  | 0.498 | 0.280 | 0.219 | 0.143 | 0.096 | 0.080 | 0.042 |
| 1.70V            |                   | 2.54 | 1.79  | 1.37  | 0.83  | 0.486 | 0.276 | 0.210 | 0.139 | 0.095 | 0.078 | 0.041 |
| 1.75V            |                   | 2.31 | 1.64  | 1.28  | 0.79  | 0.471 | 0.269 | 0.204 | 0.136 | 0.093 | 0.076 | 0.040 |
| 1.80V            |                   | 2.04 | 1.49  | 1.17  | 0.76  | 0.451 | 0.260 | 0.200 | 0.132 | 0.092 | 0.074 | 0.040 |
| 1.85V            |                   | 1.52 | 1.17  | 0.97  | 0.65  | 0.402 | 0.238 | 0.186 | 0.123 | 0.086 | 0.072 | 0.040 |

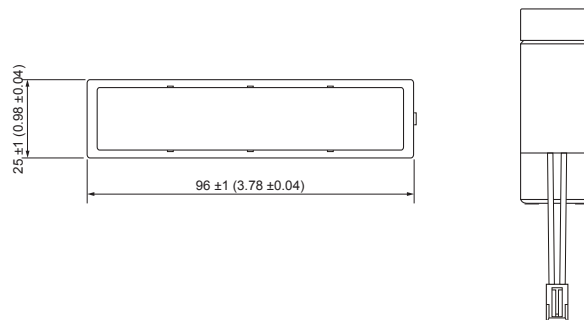
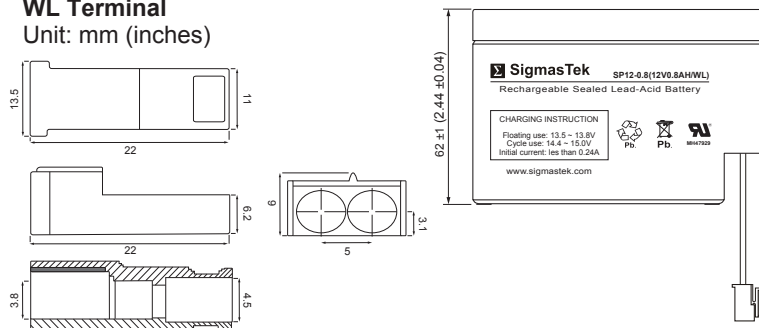
### Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

| F.V.<br>(V/cell) | Discharge<br>Time | 5min | 10min | 15min | 30min | 1h    | 2h    | 3h    | 5h    | 8h    | 10h   | 20h   |
|------------------|-------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V            |                   | 5.12 | 3.57  | 2.72  | 1.68  | 0.945 | 0.554 | 0.430 | 0.285 | 0.189 | 0.158 | 0.083 |
| 1.65V            |                   | 4.75 | 3.36  | 2.58  | 1.60  | 0.940 | 0.534 | 0.420 | 0.277 | 0.188 | 0.157 | 0.082 |
| 1.70V            |                   | 4.37 | 3.14  | 2.45  | 1.53  | 0.926 | 0.529 | 0.404 | 0.271 | 0.185 | 0.154 | 0.081 |
| 1.75V            |                   | 4.08 | 2.95  | 2.33  | 1.48  | 0.900 | 0.518 | 0.394 | 0.264 | 0.183 | 0.151 | 0.080 |
| 1.80V            |                   | 3.70 | 2.73  | 2.16  | 1.43  | 0.865 | 0.501 | 0.388 | 0.259 | 0.180 | 0.147 | 0.079 |
| 1.85V            |                   | 2.79 | 2.16  | 1.81  | 1.23  | 0.776 | 0.462 | 0.363 | 0.242 | 0.171 | 0.143 | 0.078 |

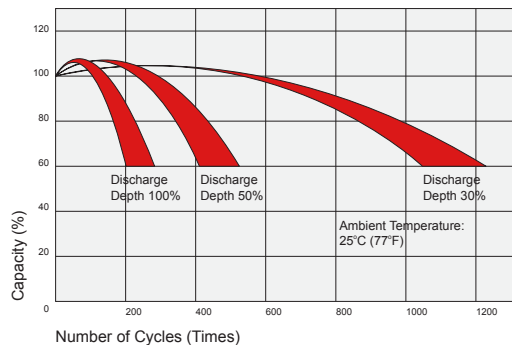
## Dimensions

### WL Terminal

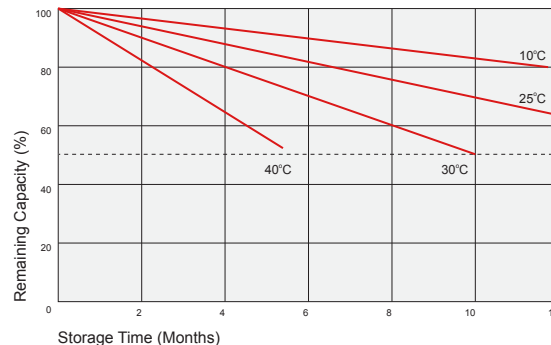
Unit: mm (inches)



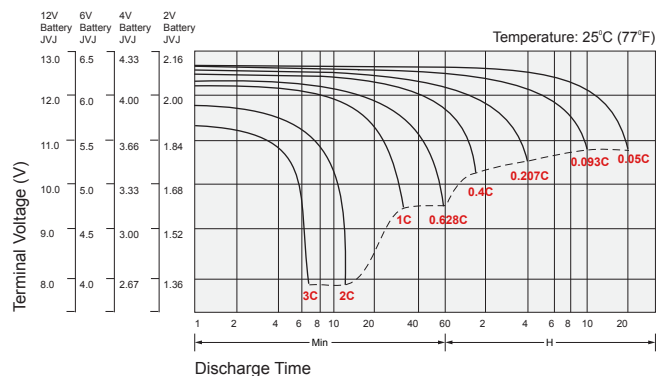
## Cycle Service Life



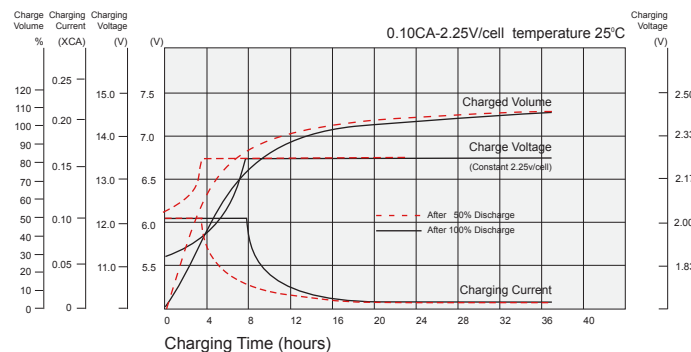
## Self Discharge Characteristics



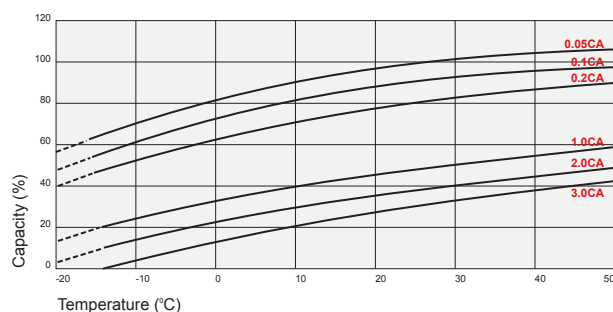
## Discharge Characteristics



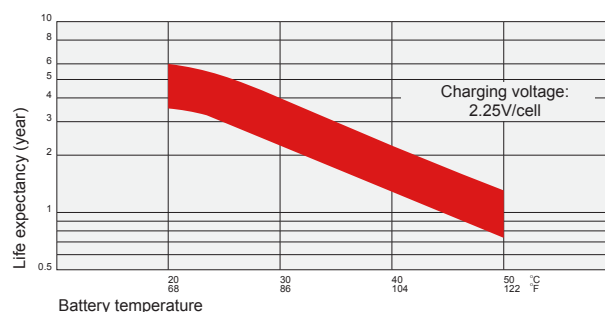
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Temperature Effects on Long Term Float Life



## Contact Information

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