

### Specifications

|                                  |                                                                                                                                                                                       |                               |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Nominal Voltage                  | 12V                                                                                                                                                                                   |                               |
| Nominal Capacity (10HR)          | 75AH                                                                                                                                                                                  |                               |
| Dimension                        | Length                                                                                                                                                                                | 260mm (10.25 inches)          |
|                                  | Width                                                                                                                                                                                 | 168mm (6.60 inches)           |
|                                  | Height                                                                                                                                                                                | 207mm (8.15 inches)           |
|                                  | Total Height (with Terminal)                                                                                                                                                          | 228mm (8.98 inches)           |
|                                  |                                                                                                                                                                                       |                               |
| Approximate Weight               | 23.0 kg (50.7 lbs)                                                                                                                                                                    |                               |
| Battery Type                     | Valve Regulated Lead-Acid Battery, AGM Design                                                                                                                                         |                               |
| Terminal Type                    | NB / IT                                                                                                                                                                               |                               |
| Rated Capacity                   | 78.8AH                                                                                                                                                                                | (20hr, 1.75V/cell, 25°C/77°F) |
|                                  | 75.8AH                                                                                                                                                                                | (10hr, 1.75V/cell, 25°C/77°F) |
|                                  | 64.5AH                                                                                                                                                                                | (5hr, 1.75V/cell, 25°C/77°F)  |
|                                  | 64.8AH                                                                                                                                                                                | (3hr, 1.60V/cell, 25°C/77°F)  |
|                                  | 45.8AH                                                                                                                                                                                | (1hr, 1.60V/cell, 25°C/77°F)  |
| Max. Discharge Current           | 900A                                                                                                                                                                                  |                               |
| Internal Resistance              | 6.6mΩ                                                                                                                                                                                 |                               |
| 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            |                   | 260.2 | 180.9 | 137.5 | 81.0  | 45.8 | 28.2 | 21.6 | 14.1 | 9.30 | 7.89 | 4.09 |
| 1.65V            |                   | 235.9 | 166.7 | 128.6 | 76.7  | 44.2 | 27.2 | 20.9 | 13.6 | 9.21 | 7.81 | 4.07 |
| 1.70V            |                   | 213.9 | 154.4 | 120.9 | 72.7  | 42.7 | 26.5 | 20.1 | 13.2 | 9.07 | 7.65 | 4.01 |
| 1.75V            |                   | 194.3 | 141.7 | 113.3 | 69.9  | 41.4 | 25.5 | 19.5 | 12.9 | 8.94 | 7.58 | 3.94 |
| 1.80V            |                   | 172.3 | 128.9 | 103.7 | 67.3  | 39.6 | 24.6 | 19.2 | 12.6 | 8.79 | 7.50 | 3.90 |
| 1.85V            |                   | 128.4 | 100.9 | 85.80 | 57.1  | 35.4 | 22.5 | 17.8 | 11.7 | 8.29 | 7.08 | 3.86 |

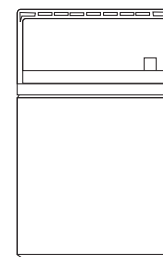
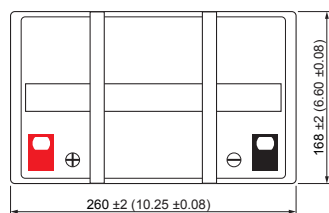
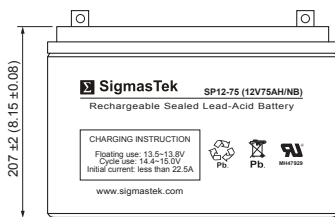
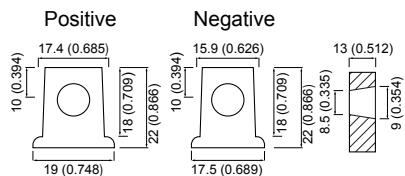
### Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

| F.V.<br>(V/cell) | Discharge<br>Time | 5min  | 10min | 15min | 30min | 1h   | 2h   | 3h   | 5h   | 8h   | 10h  | 20h  |
|------------------|-------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 1.60V            |                   | 431.3 | 307.6 | 240.6 | 147.7 | 86.0 | 53.4 | 41.2 | 27.1 | 18.2 | 15.5 | 8.05 |
| 1.65V            |                   | 400.3 | 289.9 | 228.8 | 140.9 | 83.5 | 52.0 | 40.1 | 26.3 | 18.0 | 15.4 | 8.02 |
| 1.70V            |                   | 368.2 | 271.1 | 216.8 | 134.6 | 81.4 | 50.8 | 38.7 | 25.7 | 17.8 | 15.1 | 7.92 |
| 1.75V            |                   | 343.9 | 254.5 | 205.9 | 130.1 | 79.1 | 49.0 | 37.7 | 25.1 | 17.6 | 14.9 | 7.78 |
| 1.80V            |                   | 311.7 | 235.4 | 190.9 | 126.3 | 76.0 | 47.4 | 37.1 | 24.6 | 17.3 | 14.8 | 7.71 |
| 1.85V            |                   | 234.7 | 186.4 | 160.1 | 108.7 | 68.2 | 43.7 | 34.7 | 23.0 | 16.4 | 14.0 | 7.65 |

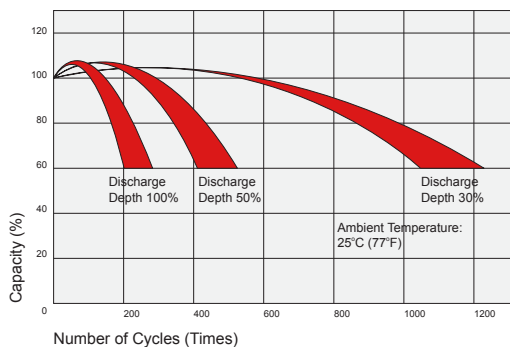
## Dimensions

### NB Terminal

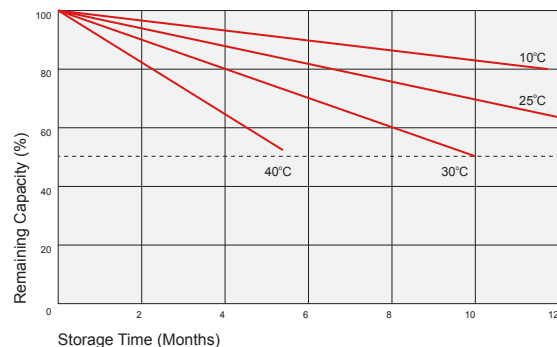
Unit: mm (inches)



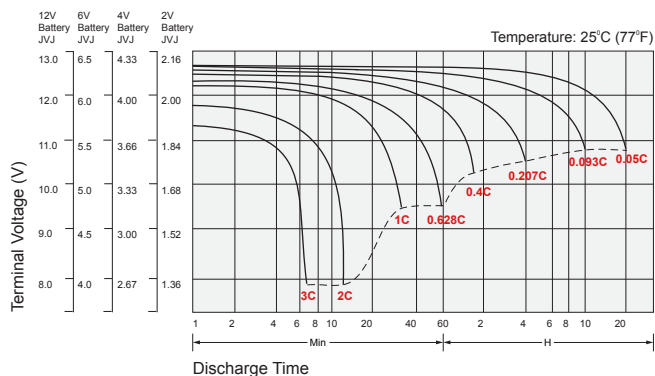
## Cycle Service Life



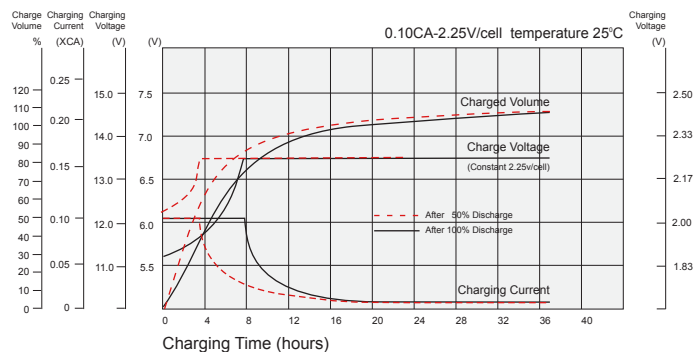
## Self Discharge Characteristics



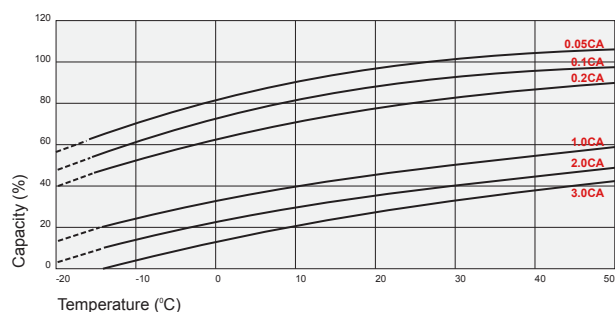
## Discharge Characteristics



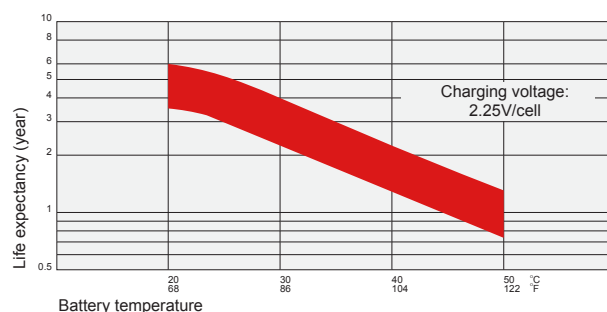
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Temperature Effects on Long Term Float Life



## Contact Information

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