

## DB Series

DB (Duration) Series batteries utilizes thick grids of modern technology are adopted so as to guarantee the design life up to 12 years. Advanced micro porous absorbed glass matt separator - minimizes diffusion of oxygen into the separator, reducing float charge current which suppressed the corrosion rate of the positive grid and extends the life of the battery.

## Application

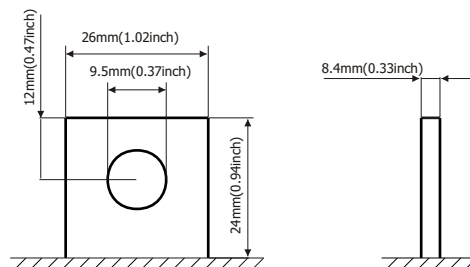
|                         |                        |
|-------------------------|------------------------|
| Cable Television        | Control Equipment      |
| Communication Equipment | Medical Equipment      |
| Security System         | Emergency Power System |
| UPS                     | Power Plant            |

## General Features

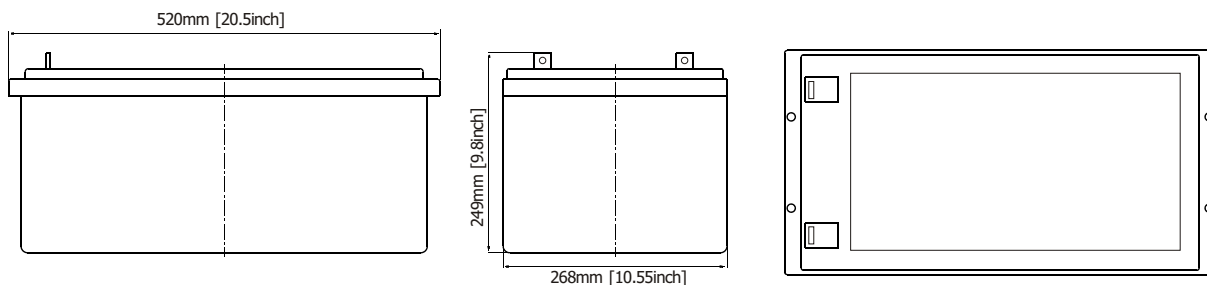
Sealed and maintenance free operation.  
 Non-Spillable construction design.  
 ABS containers and covers(UL94HB, UL94V-0) optional.  
 Safety valve installation for explosion proof.  
 High quality and high reliability.  
 Exceptional deep discharge recovery performance.  
 Low self discharge characteristic.  
 Flexibility design for multiple install positions.

## Construction

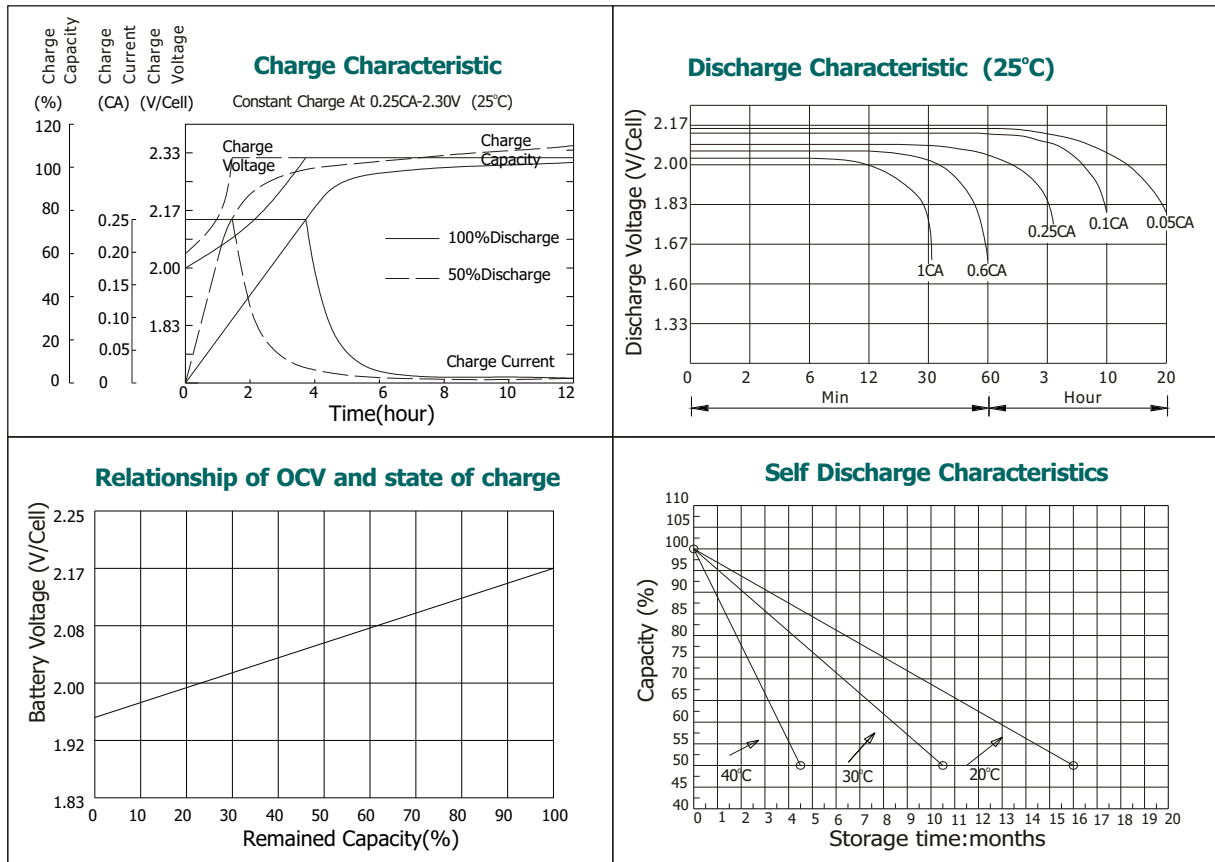
|                 |              |                    |               |
|-----------------|--------------|--------------------|---------------|
| Component ..... | Raw material | Sealant .....      | Epoxy Resin   |
| Positive .....  | Lead dioxide | Safety valve ..... | EPDR          |
| Negative .....  | Lead         | Terminal .....     | Pb Alloy      |
| Container ..... | ABS          | Separator .....    | Fiber glass   |
| Cover .....     | ABS          | Electrolyte .....  | Sulfuric acid |



**Terminal Dimensions**



| Battery Model                    | DB12-250                                    |                   |                       |                  |
|----------------------------------|---------------------------------------------|-------------------|-----------------------|------------------|
| Designed Floating Life           | 12 Years                                    |                   |                       |                  |
| Capacity(25°C)                   | 20HR(12.9A,1.75V)                           | 10HR(25A,1.75V)   | 5HR(42.4A,1.75V)      | 1HR(160A,1.75V)  |
|                                  | 258AH                                       | 250AH             | 212AH                 | 160AH            |
| Dimensions                       | Length                                      | Width             | Height                | Total Height     |
|                                  | 520mm [20.47inch]                           | 268mm [10.55inch] | 220mm [8.67inch]      | 249mm [9.81inch] |
| Approx. Weight                   | 74Kg (163.17 lbs)                           |                   |                       |                  |
| Internal Resistance              | Full charged at 25°C: 0.0037 Ohm            |                   |                       |                  |
| Self Discharge                   | 3% of capacity declined per month at (25°C) |                   |                       |                  |
| Capacity Affected by Temp.(20HR) | 40°C                                        | 25°C              | 0°C                   | -15°C            |
|                                  | 102%                                        | 100%              | 85%                   | 65%              |
| Charge Voltage(25°C)             | Cycle use                                   |                   | Float use             |                  |
|                                  | 14.4-15V(-30mV/ °C), max. Current: 50A      |                   | 13.6-13.8V(-20mV/ °C) |                  |



### Constant current discharge ratings-amperes at 25°C

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 3HR  | 5HR  | 10HR | 20HR |
|----------|------|-------|-------|-------|-----|------|------|------|------|
| 1.60V    | 910  | 624   | 455   | 273   | 172 | 71.0 | 49.6 | 27.6 | 13.7 |
| 1.67V    | 819  | 569   | 442   | 265   | 171 | 70.7 | 49.2 | 27.2 | 13.7 |
| 1.70V    | 777  | 549   | 426   | 260   | 171 | 70.7 | 49.2 | 26.9 | 13.7 |
| 1.75V    | 692  | 507   | 403   | 255   | 169 | 70.2 | 48.8 | 26.5 | 13.6 |
| 1.80V    | 624  | 471   | 385   | 247   | 167 | 69.9 | 48.4 | 26.0 | 13.1 |
| 1.85V    | 473  | 387   | 333   | 227   | 165 | 69.7 | 48.0 | 25.6 | 12.3 |

### Constant power discharge ratings-watts at 25°C

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 3HR | 5HR  | 10HR | 20HR |
|----------|------|-------|-------|-------|-----|-----|------|------|------|
| 1.60V    | 1500 | 1035  | 806   | 515   | 338 | 136 | 94.9 | 55.1 | 27.4 |
| 1.67V    | 1422 | 1022  | 798   | 504   | 327 | 136 | 94.9 | 54.3 | 27.3 |
| 1.70V    | 1329 | 996   | 785   | 491   | 318 | 136 | 94.9 | 53.9 | 27.3 |
| 1.75V    | 1238 | 931   | 738   | 478   | 315 | 134 | 93.9 | 53.0 | 27.2 |
| 1.80V    | 1110 | 866   | 694   | 465   | 310 | 132 | 92.3 | 52.0 | 26.2 |
| 1.85V    | 889  | 718   | 606   | 426   | 307 | 132 | 91.0 | 51.1 | 24.6 |

