

|                                |                           |                             |                                       |
|--------------------------------|---------------------------|-----------------------------|---------------------------------------|
| <b>20 Years</b><br>Design Life | <b>TPPL</b><br>Technology | <b>5 Years</b><br>Warranty* | <b>-40 °C ~ +65 °C</b><br>Temperature |
| High Rate Type                 | UPS                       | Emergency Lighting          | Recyclable                            |

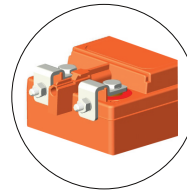
# Pure Lead Power

## 180-12FT M8V0 (12V180W)

Item Nr.: SSB2037902

### Applications (for industrial standby use)

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Communication power supply
- DC power supply



### Certificates

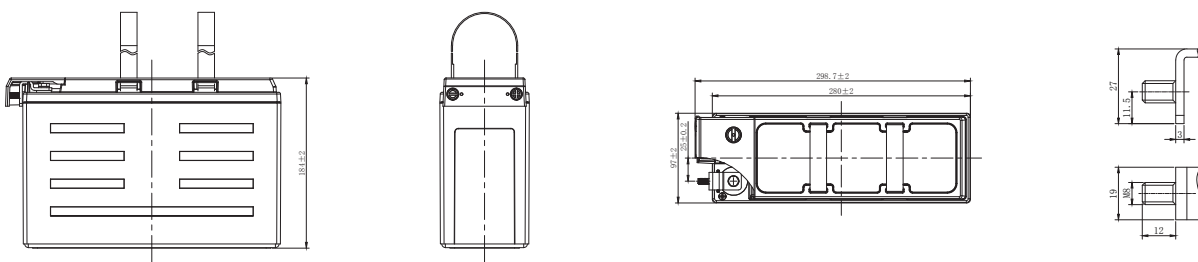


### Specifications

|   |  |                        |   |
|---|--|------------------------|---|
| <b>Nominal Voltage</b>                        | 12V  | <b>Float Charge</b>    | 2.285V/cell @ 20°C, 2.27V/cell @ 25°C<br>Max. Charging Current: 0.1 - 0.3C<br>Temperature Coefficient: -3mV/cell/°C   |
| <b>Nominal Rate</b>                           | 182.7W/cell (W <sub>15</sub> , 1.60V/cell)                 | <b>Boost Charge</b>    | 2.395V/cell@20°C, 2.375V/cell@25°C<br>Max. Charging Current: 0.1 - 0.3C<br>Temperature Coefficient: -4mV/cell/°C  |
| <b>Nominal Capacity</b>                       | 41Ah (C <sub>10</sub> , 1.80V/cell)                        | <b>Self Discharge</b>  | SSB Battery PLP batteries may be stored for up to 24 months at 20°C (self-discharge per month ≤0.5%) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |
| <b>Approx. Weight</b>                         | 12.5kg   | <b>Life Expectancy</b> | >12 years according to EUROBAT (Very Long Life)<br>20 years Design Life   |
| <b>Terminal</b>                               | FT (M-M8)/TT (F-M8)  |                        |   |
| <b>Container Material</b>                     | ABS UL94 V0  |                        |   |
| <b>Max. Discharge Current</b>                 | 456A (5s)<br>169.4 A (30s)                                 |                        |   |
| <b>Short-circuit Current</b>                  | 760A   |                        |   |
| <b>Internal Resistance / Impedance (1kHz)</b> | Approx. 6mΩ  |                        |   |
| <b>Nominal Oper. Temp. R.</b>                 | 20±2°C   |                        |   |
| <b>Operating Temp. Range</b>                  | Discharge: -40~65°C<br>Charge: -20~45°C<br>Storage: 5~30°C |                        |   |

### Dimensions

- **FT (M-M8)/TT (F-M8)**  
Unit: mm | Dimensions: 298.7 Length X 97 Width X 184 Height (184 Height incl. Terminal)



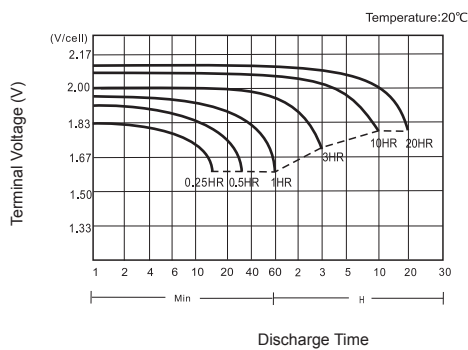
### Constant Current Discharge (Amperes) at 20°C

| F.V/Time   | 5min  | 10min | 15min | 20min | 30min | 45min | 1h   | 2h   | 3h   | 4h  | 5h  | 8h  | 10h | 20h |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|-----|-----|-----|-----|-----|
| 1.85V/cell | 94.7  | 84.7  | 70.6  | 57.9  | 47.0  | 35.2  | 27.4 | 17.6 | 11.8 | 9.4 | 7.2 | 5.0 | 4.1 | 2.2 |
| 1.80V/cell | 105.3 | 92.8  | 77.6  | 62.0  | 49.3  | 36.5  | 28.4 | 17.9 | 11.9 | 9.5 | 7.4 | 5.1 | 4.1 | 2.2 |
| 1.75V/cell | 115.2 | 97.4  | 81.1  | 64.7  | 50.8  | 37.5  | 29.2 | 18.0 | 12.0 | 9.5 | 7.6 | 5.2 | 4.2 | 2.2 |
| 1.70V/cell | 122.1 | 102.5 | 84.5  | 66.7  | 52.3  | 38.3  | 29.7 | 18.2 | 12.1 | 9.6 | 7.7 | 5.2 | 4.2 | 2.3 |
| 1.65V/cell | 133.2 | 111.2 | 89.8  | 69.8  | 53.7  | 39.0  | 30.2 | 18.3 | 12.2 | 9.6 | 7.8 | 5.3 | 4.3 | 2.3 |
| 1.60V/cell | 140.2 | 117.2 | 93.6  | 72.5  | 56.0  | 39.6  | 30.4 | 18.4 | 12.3 | 9.6 | 8.0 | 5.4 | 4.3 | 2.4 |

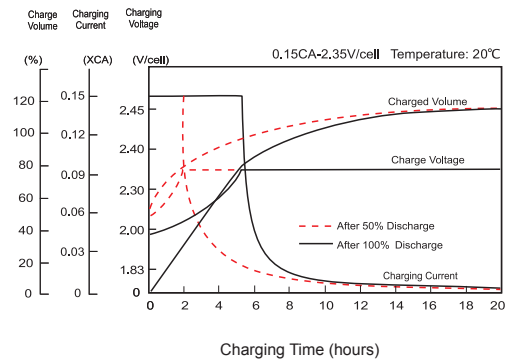
### Constant Power Discharge (Watts/cell) at 20°C

| F.V/Time   | 5min  | 10min | 15min | 20min | 30min | 45min | 1h   | 2h   | 3h   | 4h   | 5h   | 8h   | 10h | 20h |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-----|-----|
| 1.85V/cell | 188.0 | 167.5 | 141.1 | 116.3 | 95.2  | 71.9  | 56.2 | 36.1 | 24.0 | 19.0 | 15.1 | 10.3 | 8.4 | 4.3 |
| 1.80V/cell | 204.3 | 180.1 | 152.6 | 123.3 | 99.1  | 73.6  | 57.5 | 36.1 | 24.1 | 19.1 | 15.2 | 10.4 | 8.4 | 4.4 |
| 1.75V/cell | 219.1 | 185.8 | 157.1 | 126.5 | 100.2 | 74.6  | 58.4 | 36.2 | 24.2 | 19.2 | 15.3 | 10.6 | 8.5 | 4.4 |
| 1.70V/cell | 231.3 | 194.3 | 166.4 | 132.2 | 103.4 | 75.7  | 58.9 | 36.2 | 24.2 | 19.3 | 15.5 | 10.6 | 8.5 | 4.5 |
| 1.65V/cell | 250.9 | 210.0 | 175.6 | 137.5 | 105.7 | 76.7  | 59.4 | 36.3 | 24.3 | 19.3 | 15.7 | 10.7 | 8.6 | 4.5 |
| 1.60V/cell | 263.0 | 220.3 | 182.7 | 141.7 | 109.4 | 77.3  | 59.7 | 36.3 | 24.4 | 19.4 | 15.8 | 10.8 | 8.7 | 4.7 |

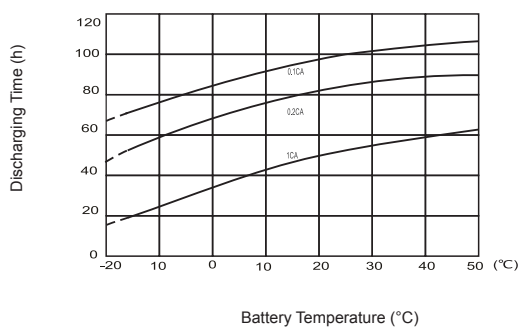
### Discharge Characteristics



### Float Charging Characteristics



### Effect of Temperature on Discharging Time



### Self Discharge Characteristics

