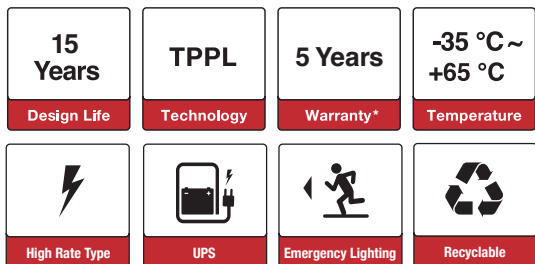




# Pure Lead Power 400-12 M8V0 (12V400W)

Item Nr.: SSB2037953



## 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



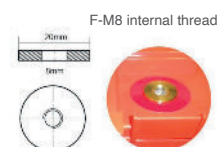
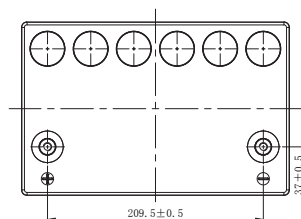
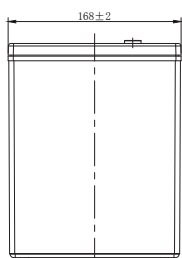
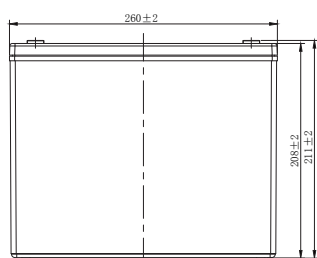
## Specifications

|                                               |                                                             |                         |                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------|-------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Nominal Voltage</b>                        | 12V                                                         | <b>Float Charge</b>     | 2.285V/cell @ 20°C, 2.270V/cell @ 25°C<br>Temperature coefficient: -3mV/cell/°C                                                                                                                                                                                                                                        |
| <b>Open-circuit voltage</b>                   | 12.96V (fully charged)                                      | <b>Boost Charge</b>     | 2.395V/cell @ 20°C, 2.375V/cell @ 25°C<br>Temperature coefficient: -4mV/cell/°C                                                                                                                                                                                                                                        |
| <b>Nominal Rate</b>                           | 400.7W/cell (W <sub>15</sub> , 1.60V/cell)                  | <b>Charging Current</b> | 0.1-0.3C                                                                                                                                                                                                                                                                                                               |
| <b>Nominal Capacity</b>                       | 85Ah (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%).<br>For higher temperatures the time interval will be shorter. Batteries need to be given a freshening charge when the OCV is <12.72 V/block or when the maximum storage time is reached, whichever occurs first. |
| <b>Approx. Weight</b>                         | 25.6kg                                                      | <b>Life Expectancy</b>  | >12 years according to EUROBAT (Very Long Life)<br>15 years Design Life                                                                                                                                                                                                                                                |
| <b>Terminal</b>                               | F-M8                                                        |                         |                                                                                                                                                                                                                                                                                                                        |
| <b>Container Material</b>                     | ABS UL94 V0                                                 |                         |                                                                                                                                                                                                                                                                                                                        |
| <b>Max. Discharge Current</b>                 | 960A (5 s)<br>437.7A (30s)                                  |                         |                                                                                                                                                                                                                                                                                                                        |
| <b>Short-circuit Current</b>                  | 1760A                                                       |                         |                                                                                                                                                                                                                                                                                                                        |
| <b>Internal Resistance / Impedance (1kHz)</b> | Approx. 4.2mΩ (±10 %)                                       |                         |                                                                                                                                                                                                                                                                                                                        |
| <b>Nominal Oper. Temp. R.</b>                 | 20±2°C                                                      |                         |                                                                                                                                                                                                                                                                                                                        |
| <b>Operating Temp. Range</b>                  | Discharge: -35°~65°C<br>Charge: -20~45°C<br>Storage: 5~30°C |                         |                                                                                                                                                                                                                                                                                                                        |

## Dimensions

■ Unit: mm | Dimensions: 260 Length X 168 Width X 208 Height (211 Height incl. Terminal)

■ TT(F-M8)



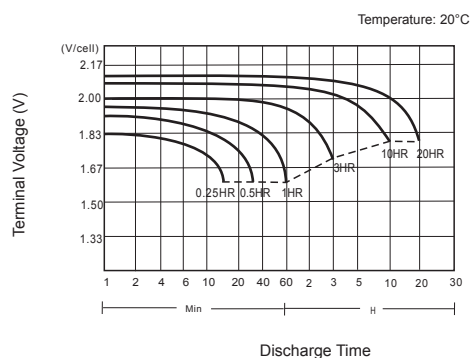
## Constant Current Discharge (Amperes) at 20°C

| F.V/Time   | 5min  | 10min | 15min | 20min | 30min | 45min | 1h   | 2h   | 3h   | 4h   | 5h   | 8h   | 10h | 20h |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-----|-----|
| 1.85V/cell | 232.9 | 172.1 | 147.9 | 123.6 | 93.6  | 69.4  | 54.7 | 30.5 | 21.8 | 17.6 | 14.9 | 10.1 | 8.3 | 4.3 |
| 1.80V/cell | 271.4 | 200.3 | 164.7 | 135.0 | 100.0 | 73.0  | 56.9 | 32.0 | 22.8 | 18.2 | 15.6 | 10.5 | 8.5 | 4.4 |
| 1.75V/cell | 301.0 | 219.2 | 178.5 | 145.5 | 107.5 | 75.1  | 58.5 | 32.9 | 23.4 | 18.8 | 15.9 | 10.6 | 8.6 | 4.5 |
| 1.70V/cell | 330.6 | 234.9 | 189.9 | 153.0 | 111.6 | 77.8  | 60.8 | 33.4 | 23.9 | 19.1 | 16.2 | 10.7 | 8.7 | 4.5 |
| 1.67V/cell | 359.1 | 245.2 | 200.2 | 155.9 | 116.1 | 80.8  | 62.1 | 33.9 | 24.2 | 19.3 | 16.3 | 10.8 | 8.8 | 4.5 |
| 1.60V/cell | 391.8 | 254.0 | 207.0 | 161.9 | 118.4 | 82.1  | 63.2 | 34.5 | 24.5 | 19.5 | 16.5 | 10.9 | 8.8 | 4.6 |

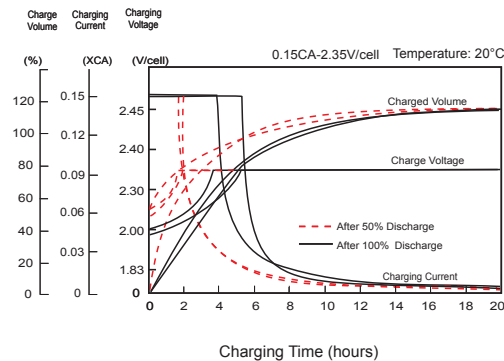
## Constant Power Discharge (Watts/cell) at 20°C

| F.V/Time   | 5min  | 10min | 15min | 20min | 30min | 45min | 1h    | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h |
|------------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-----|
| 1.85V/cell | 462.4 | 340.5 | 295.4 | 248.5 | 189.9 | 141.9 | 112.1 | 63.0 | 45.2 | 36.5 | 31.2 | 20.8 | 17.4 | 8.5 |
| 1.80V/cell | 526.3 | 388.9 | 324.0 | 268.9 | 201.0 | 147.1 | 115.2 | 65.3 | 46.6 | 37.2 | 32.0 | 21.4 | 17.3 | 8.7 |
| 1.75V/cell | 572.3 | 418.2 | 345.9 | 284.5 | 211.9 | 149.3 | 117.0 | 66.2 | 47.3 | 38.1 | 32.1 | 21.6 | 17.4 | 8.9 |
| 1.70V/cell | 626.0 | 445.3 | 374.1 | 303.3 | 220.8 | 153.7 | 120.4 | 66.5 | 47.7 | 38.2 | 32.4 | 21.7 | 17.4 | 8.9 |
| 1.67V/cell | 668.1 | 462.9 | 391.8 | 307.2 | 228.5 | 159.0 | 122.3 | 67.3 | 48.0 | 38.6 | 32.6 | 21.8 | 17.5 | 9.0 |
| 1.60V/cell | 727.3 | 477.3 | 400.7 | 316.5 | 231.2 | 160.1 | 123.4 | 67.7 | 48.4 | 38.7 | 32.8 | 22.0 | 17.6 | 9.1 |

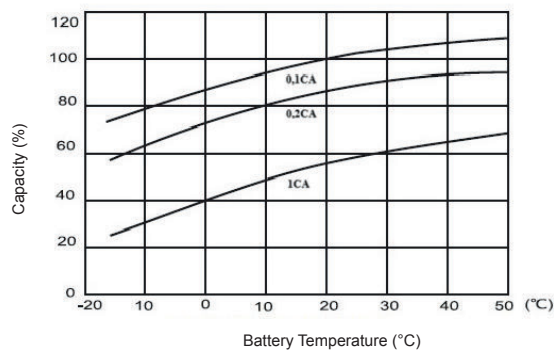
## Discharge Characteristics



## Charging Characteristics



## Effect of Temperature on Capacity



## Float Life Characteristics

