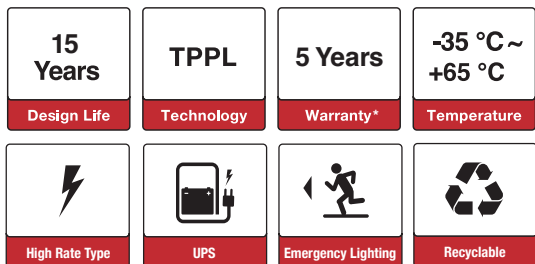




# Pure Lead Power 610-12 M8V0 (12V610W)

Item Nr.: SSB2037956



## 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



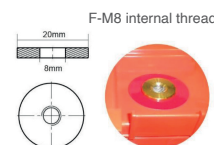
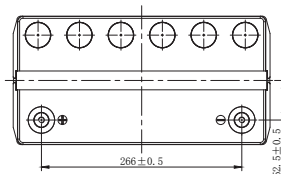
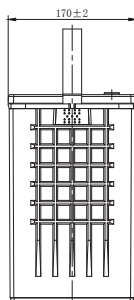
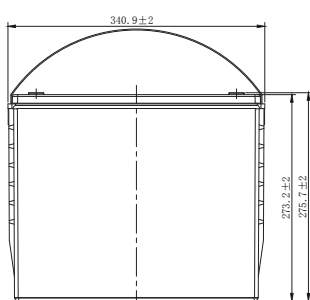
## Specifications

|                                               |                                                            |                         |                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------|------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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>                           | 612.4W/cell (W <sub>15</sub> , 1.60V/cell)                 | <b>Charging Current</b> | 0.1-0.3C                                                                                                                                                                                                                                                                                                               |
| <b>Nominal Capacity</b>                       | 135Ah (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>                         | 41.7kg                                                     | <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>                 | 1500A (5 s)<br>663.9A (30s)                                |                         |                                                                                                                                                                                                                                                                                                                        |
| <b>Short-circuit Current</b>                  | 2750A                                                      |                         |                                                                                                                                                                                                                                                                                                                        |
| <b>Internal Resistance / Impedance (1kHz)</b> | Approx. 3.6mΩ (±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: 340.9 Length X 170 Width X 273.2 Height (275.7 Height incl. Terminal)

■ TT(F-M8)



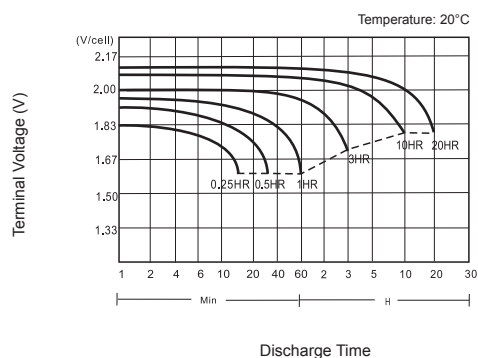
## Constant Current Discharge (Amperes) at 20°C

| F.V/Time   | 5min  | 10min | 15min | 20min | 30min | 45min | 1h    | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h |
|------------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-----|
| 1.85V/cell | 340.3 | 277.1 | 224.0 | 194.1 | 152.2 | 112.9 | 92.0  | 51.4 | 38.1 | 29.5 | 25.1 | 17.2 | 13.3 | 6.9 |
| 1.80V/cell | 390.2 | 316.5 | 249.5 | 212.1 | 162.5 | 118.6 | 95.7  | 53.8 | 39.9 | 30.7 | 26.2 | 17.7 | 13.5 | 7.0 |
| 1.75V/cell | 438.5 | 349.7 | 270.4 | 226.3 | 173.0 | 121.9 | 98.4  | 55.3 | 40.8 | 31.5 | 26.8 | 17.9 | 13.7 | 7.1 |
| 1.70V/cell | 472.4 | 374.7 | 287.7 | 238.1 | 179.6 | 126.4 | 102.2 | 56.1 | 41.7 | 32.1 | 27.2 | 18.1 | 13.8 | 7.2 |
| 1.67V/cell | 508.3 | 398.3 | 303.4 | 249.5 | 186.9 | 131.3 | 104.4 | 57.1 | 42.1 | 32.5 | 27.4 | 18.4 | 13.9 | 7.2 |
| 1.60V/cell | 544.2 | 415.9 | 316.4 | 256.5 | 190.5 | 133.3 | 106.2 | 58.0 | 42.7 | 32.8 | 27.8 | 18.6 | 14.0 | 7.3 |

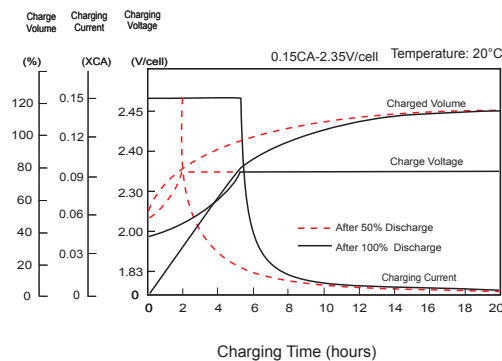
## Constant Power Discharge (Watts/cell) at 20°C

| F.V/Time   | 5min   | 10min | 15min | 20min | 30min | 45min | 1h    | 2h    | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
|------------|--------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 1.85V/cell | 675.5  | 548.1 | 447.5 | 390.3 | 308.5 | 230.6 | 188.6 | 106.1 | 78.9 | 61.1 | 35.8 | 35.3 | 27.8 | 13.6 |
| 1.80V/cell | 756.8  | 614.4 | 490.9 | 422.3 | 326.7 | 239.0 | 193.7 | 109.7 | 81.4 | 62.5 | 36.4 | 36.3 | 27.5 | 13.9 |
| 1.75V/cell | 833.7  | 667.0 | 524.0 | 442.5 | 341.2 | 242.5 | 196.8 | 111.3 | 82.4 | 64.0 | 36.2 | 36.6 | 27.8 | 14.1 |
| 1.70V/cell | 894.6  | 710.3 | 566.8 | 472.0 | 355.4 | 249.7 | 202.2 | 111.6 | 83.4 | 64.2 | 36.3 | 36.8 | 27.6 | 14.2 |
| 1.67V/cell | 945.5  | 752.1 | 593.6 | 491.6 | 368.1 | 258.4 | 205.6 | 113.3 | 83.7 | 65.0 | 36.7 | 37.1 | 27.9 | 14.3 |
| 1.60V/cell | 1010.2 | 781.5 | 612.4 | 501.5 | 372.0 | 260.0 | 207.4 | 114.0 | 84.3 | 65.2 | 36.8 | 37.5 | 28.1 | 14.4 |

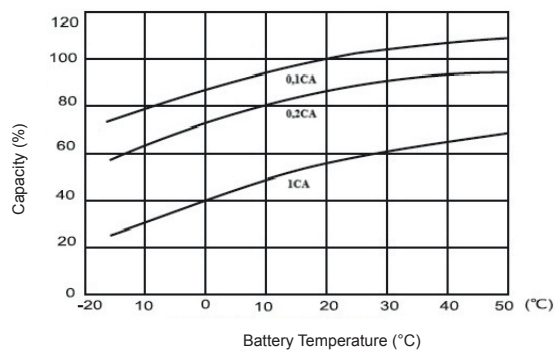
## Discharge Characteristics



## Charging Characteristics



## Effect of Temperature on Capacity



## Float Life Characteristics

