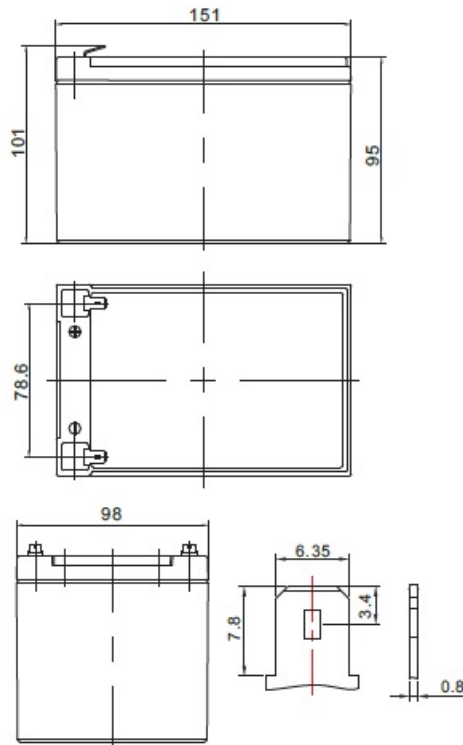




# SBL 12-12L

|   |   |                 |
|---|---|-----------------|
| <b>Nominal voltage</b>                      | 12 V  |                 |
| <b>Nominal capacity</b>                     | 12 Ah @ C20 to 1,75 V/cell at 20°C                            |                 |
| <b>Dimensions</b>                           | <b>Length</b>   | 151 mm          |
|   | <b>Width</b>  | 98 mm           |
|   | <b>Height / Total height</b>                                  | 95 / 101 mm     |
| <b>Weight</b>                               | ~ 3,7 kg  |                 |
| <b>Technology</b>                           | VRLA (Valve Regulated Lead Acid)<br>AGM (Absorbent Glass Mat) |                 |
| <b>Design life time</b>                     | 10-12 years (trickle use at 20°C)                             |                 |
| <b>Internal resistance</b>                  | ~ 19,0 mΩ (full charged)                                      |                 |
| <b>Operating temperature range</b>          | <b>Discharge</b>  | -20°C ~ +60°C   |
|   | <b>Charge</b>   | 0°C ~ +60°C     |
|   | <b>Storage</b>  | -20°C ~ +60°C   |
| <b>Normal operating temperature range</b>   | +20°C ± 5°C   |                 |
| <b>Maximum discharge current</b>            | 180 A (5 sek.)  |                 |
| <b>Short circuit current</b>                | 600 A   |                 |
| <b>Recommended maximum charging current</b> | 3,6 A   |                 |
| <b>Charging voltage</b>                     | <b>Standby use (at 20°C)</b>                                  | 13,5 ~ 13,8 VDC |
|   | <b>Cycle use (at 20°C)</b>                                    | 14,4 ~ 14,8 VDC |
| <b>Self discharge</b>                       | Monthly is less than 3% at 20°C                               |                 |
| <b>Container material</b>                   | ABS UL94HB (optional UL94-V0)                                 |                 |
| <b>Terminal types</b>                       | fast-on 6,3 mm  |                 |



## CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A at 20°C)

| Voltage / time | 5 min | 10 min | 15 min | 30 min | 1 h  | 2 h  | 3 h  | 4 h  | 5 h  | 8 h  | 10 h | 20 h |
|----------------|-------|--------|--------|--------|------|------|------|------|------|------|------|------|
| 9.6 V          | 46,40 | 31,70  | 24,80  | 13,80  | 8,14 | 4,32 | 3,18 | 2,65 | 2,12 | 1,48 | 1,18 | 0,61 |
| 10.0 V         | 45,00 | 30,80  | 24,30  | 13,50  | 8,04 | 4,28 | 3,15 | 2,63 | 2,10 | 1,47 | 1,17 | 0,61 |
| 10.2 V         | 43,50 | 29,90  | 23,70  | 13,30  | 7,94 | 4,24 | 3,12 | 2,60 | 2,07 | 1,45 | 1,16 | 0,61 |
| 10.5 V         | 42,10 | 29,00  | 23,20  | 13,00  | 7,85 | 4,20 | 3,09 | 2,58 | 2,05 | 1,44 | 1,14 | 0,60 |
| 10.8 V         | 40,60 | 28,20  | 22,60  | 12,70  | 7,75 | 4,16 | 3,06 | 2,55 | 2,02 | 1,41 | 1,12 | 0,59 |
| 11.1 V         | 38,98 | 27,07  | 21,70  | 12,19  | 7,44 | 4,00 | 2,94 | 2,45 | 1,94 | 1,36 | 1,08 | 0,57 |

## CONSTANT POWER DISCHARGE CHARACTERISTICS (W at 20°C)

| Voltage / time | 5 min | 10 min | 15 min | 30 min | 1 h  | 2 h  | 3 h  | 4 h  | 5 h  | 8 h  | 10 h | 20 h |
|----------------|-------|--------|--------|--------|------|------|------|------|------|------|------|------|
| 9.6 V          | 517,2 | 352,2  | 280,2  | 162,0  | 96,6 | 53,0 | 39,0 | 32,5 | 25,2 | 17,6 | 13,4 | 6,8  |
| 10.0 V         | 504,6 | 346,2  | 276,0  | 159,6  | 96,0 | 52,6 | 38,6 | 32,2 | 25,0 | 17,5 | 13,3 | 6,8  |
| 10.2 V         | 491,4 | 339,6  | 271,8  | 157,2  | 94,8 | 52,0 | 38,2 | 31,9 | 24,8 | 17,4 | 13,2 | 6,7  |
| 10.5 V         | 478,8 | 333,6  | 267,6  | 154,8  | 94,2 | 51,5 | 37,9 | 31,6 | 24,7 | 17,3 | 13,1 | 6,7  |
| 10.8 V         | 465,6 | 327,6  | 263,4  | 152,4  | 93,0 | 50,9 | 37,4 | 31,2 | 24,5 | 17,1 | 13,0 | 6,6  |
| 11.1 V         | 447,0 | 314,5  | 252,9  | 146,3  | 89,3 | 48,9 | 35,9 | 30,0 | 23,5 | 16,5 | 12,5 | 6,3  |

### According with:

|                     |           |
|---------------------|-----------|
| PN-EN 60896-21:2007 | ISO 9001  |
| PN-EN 60896-22:2007 | ISO 14001 |
| PN-EN 61056-1:2013  | UL1989    |
| PN-EN 61056-2:2013  |           |
| PN-E-83016:1999     |           |