

## Sonnenschein SOLAR

The compact alternative for smaller solar applications

Sonnenschein SOLAR batteries are specially designed for small to medium performance requirements in leisure and consumer applications. The advantages of the maintenance free VRLA-batteries are enhanced by the worldwide excellent reputation and technical image of the dryfit technology.

### Your benefits:

- > **Excellent cycling performance** – 800 cycles at 60% Depth of Discharge  $C_{10}$  (at 20 °C)
- > **dryfit Gel** – VRLA technology
- > **Lowest energy consumption** – saving costs
- > **Robust design** – resilient in harsh conditions
- > **Proof against deep discharge** – greater long-term energy delivery
- > **Completely recyclable** – low CO<sub>2</sub> footprint



### Specifications:

- > Nominal capacity 6.60 – 230 Ah  $C_{100}$  (20 °C)
- > Long shelf life up to 2 years at 20 °C without recharge due to the very low self discharge rate
- > Designed in accordance with IEC 61427 and IEC 60896-21/22
- > Manufactured in Europe in our ISO 9001 certified production plants
- > Trouble-free transport of operational blocks, no restrictions for rail, road, sea and air transportation (IATA, DGR, clause A67)
- > Approval: UL (Underwriter Laboratories), DNV GL (Germanischer Lloyd)

|  |               |            |            |                                     |                              |                                  |                                |
|--|---------------|------------|------------|-------------------------------------|------------------------------|----------------------------------|--------------------------------|
|  |               |            |            |                                     |                              |                                  |                                |
| Nominal capacity 6.60 – 230 Ah $C_{100}$ | Block battery | Grid plate | Recyclable | Valve regulated lead-acid batteries | Proof against deep discharge | Maintenance-free (no topping up) | 800 cycles at 60% DoD $C_{10}$ |

# Sonnenschein SOLAR

## Technical data

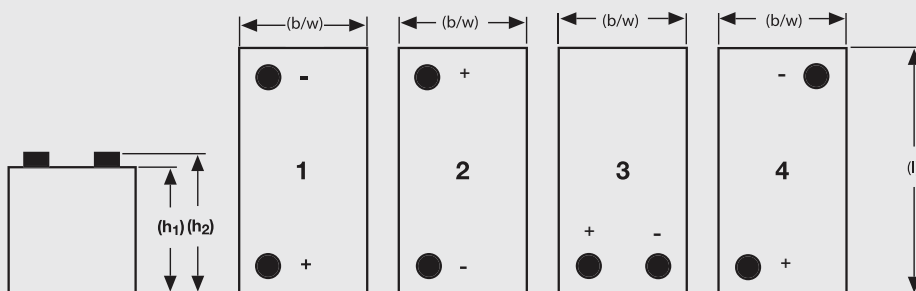
### Technical characteristics and data

| Type      | Part number     | Nom. voltage | Nominal capacity                  | Discharge current $I_{100}$ | Length (l) | Width (b/w) | Height up to top of cover (h1) | Height including connectors (h2) | Weight approx. kg | Terminal   | Terminal position |
|-----------|-----------------|--------------|-----------------------------------|-----------------------------|------------|-------------|--------------------------------|----------------------------------|-------------------|------------|-------------------|
|           |                 | V            | $C_{100}$ 1.80 Vpc<br>20 °C<br>Ah |                             |            |             |                                |                                  |                   |            |                   |
| S12/6.6 S | NGS01206D6HSOSA | 12           | 6.60                              | 0.06                        | 152        | 65.5        | 94.5                           | 98.4                             | 2.60              | S-4.8      | 3                 |
| S12/17 G5 | NGS0120017HSOBA | 12           | 17.0                              | 0.17                        | 181        | 76.0        | -                              | 167                              | 6.10              | G-M5       | 1                 |
| S12/27 G5 | NGS0120027HSOBA | 12           | 27.0                              | 0.27                        | 167        | 176         | -                              | 126                              | 9.60              | G-M5       | 1                 |
| S12/32 G6 | NGS0120032HSOBA | 12           | 32.0                              | 0.32                        | 197        | 132         | 160                            | 184                              | 11.1              | G-M6       | 2                 |
| S12/41 A  | NGS0120041HSOCA | 12           | 41.0                              | 0.41                        | 210        | 175         | -                              | 175                              | 14.2              | A-Terminal | 1                 |
| S12/60 A  | NGS0120060HSOCA | 12           | 60.0                              | 0.60                        | 261        | 136         | 208                            | 230                              | 18.1              | A-Terminal | 1                 |
| S12/85 A  | NGS0120085HSOCA | 12           | 85.0                              | 0.85                        | 353        | 175         | -                              | 190                              | 26.8              | A-Terminal | 1                 |
| S12/90 A  | NGS0120090HSOCA | 12           | 90.0                              | 0.90                        | 330        | 171         | 213                            | 236                              | 29.2              | A-Terminal | 2                 |
| S12/130 A | NGS0120130HSOCA | 12           | 130                               | 1.30                        | 286        | 269         | 208                            | 230                              | 37.5              | A-Terminal | 4                 |
| S12/230 A | NGS0120230HSOCA | 12           | 230                               | 2.30                        | 518        | 274         | 216                            | 238                              | 67.0              | A-Terminal | 3                 |

### Capacities $C_1$ - $C_{100}$ (20 °C) in Ah

| Type      | $C_1$<br>1.70 Vpc | $C_5$<br>1.70 Vpc | $C_{10}$<br>1.70 Vpc | $C_{20}$<br>1.75 Vpc | $C_{100}$<br>1.80 Vpc |
|-----------|-------------------|-------------------|----------------------|----------------------|-----------------------|
| S12/6.6 S | 2.90              | 4.60              | 5.10                 | 5.70                 | 6.60                  |
| S12/17 G5 | 9.30              | 12.6              | 14.3                 | 15.0                 | 17.0                  |
| S12/27 G5 | 15.0              | 22.1              | 23.5                 | 24.0                 | 27.0                  |
| S12/32 G6 | 16.9              | 24.4              | 27.0                 | 28.0                 | 32.0                  |
| S12/41 A  | 21.0              | 30.6              | 34.0                 | 38.0                 | 41.0                  |
| S12/60 A  | 30.0              | 42.5              | 47.5                 | 50.0                 | 60.0                  |
| S12/85 A  | 55.0              | 68.5              | 74.0                 | 76.0                 | 85.0                  |
| S12/90 A  | 50.5              | 72.0              | 78.0                 | 84.0                 | 90.0                  |
| S12/130 A | 66.0              | 93.5              | 104                  | 110                  | 130                   |
| S12/230 A | 120               | 170               | 190                  | 200                  | 230                   |

### Drawings with terminal position, terminal and torque



Not to scale!



8 Nm

6 Nm



5 Nm