

## SBYH-AGM-12-5.5 // 12V 5.5Ah

AGM-Bleiakku für Standby- und Hochstrom-Anwendungen  
Qualitativ hochwertige und speziell abgestimmte Komponenten zeichnen diese Akku-Serie aus. Dadurch eignet sich der Akku für eine Vielzahl von Anwendungen, u.a. die, bei denen viel Energie in kurzer Zeit zur Verfügung gestellt werden muss.



| SPEZIFIKATION                        |                                   |          |           |
|--------------------------------------|-----------------------------------|----------|-----------|
| Nennspannung                         | 12 V                              |          |           |
| Kapazität                            | 5.5 Ah (C20)                      |          |           |
| Gewicht                              | 1.62 kg                           |          |           |
| Abmaße (lxbxh)                       | 90x70x101 (107) mm                |          |           |
| Poltyp                               | T2                                |          |           |
| Gehäusematerial                      | ABS (UL94:HB)                     |          |           |
| Innenwiderstand                      | < 27mΩ                            |          |           |
| Max. Entladestrom                    | 75 A (5 sec)                      |          |           |
| Max. Ladestrom                       | 1.5 A                             |          |           |
| Schwebeladespannung (20°C)           | 13.65 V (± 1%)                    |          |           |
| Lebensdauer                          | 6 bis 9 Jahre nach EUROBAT (20°C) |          |           |
|                                      | bis zu 5 Jahre (25°C)             |          |           |
| Kapazitätsverlust pro Monat bei 20°C | < 3%*                             |          |           |
| Betriebstemperatur-Bereich           | Lagerung                          | Ladung   | Entladung |
|                                      | -20~60°C                          | -10~60°C | -20~60°C  |
|                                      | Verpackungseinheit                |          |           |
| 8 pro Box / 560 pro Palette          |                                   |          |           |

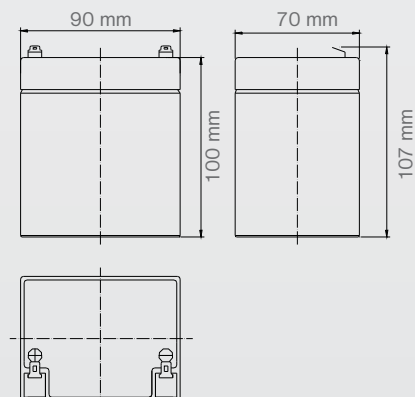
| SICHERHEIT   |  |  |  |
|--|--|--|--|
| <b>Ventile</b><br>Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruckventil ausgestattet, das nach dem Öffnen wieder schließt.                   |  |  |  |
| <b>Gasung</b><br>VRLA Batterien setzen Wasserstoffgas frei, das in Verbindung mit Luft eine explosive Mischung bilden kann. Nicht in gasdichten Gehäusen lagern. |  |  |  |
| <b>Einbau</b><br>Kann in beliebiger Lage installiert und betrieben werden. Jedoch sollte ein dauerhafter Betrieb und Laden über Kopf vermieden werden.           |  |  |  |
| <b>Transport</b><br>battery-direct Batterien sind kein Gefahrgut und unterliegen keiner Transportbeschränkung (Schiene, Straße, Wasser und Luft).                |  |  |  |
|   |  |  |  |

\* Vorsicht Selbstentladung! Spätestens bei einer Spannung von 12.6V nachladen.

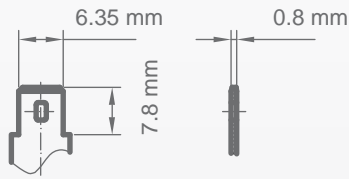
### BESONDERHEITEN

- ✓ AGM-Technologie (Absorbent Glass Mat) für wartungsfreien Betrieb.
- ✓ Lange Lebensdauer und überdurchschnittlich viele Zyklen (Laden-Entladen) durch hochwertige Materialien (z.B. 99,9% reines Blei) und sorgfältige Verarbeitung.
- ✓ Optimale Materialabstimmung für maximale Leistung durch Glasvlies-Separatoren mit maximiertem Absorptionsgrad und ausgewogenem Elektrolyt.
- ✓ Hohe Kapazität durch Zinnsulfat.
- ✓ Effiziente Gas-Rekombination (bis zu 99%) durch optimale Plattengröße.
- ✓ Hohe Effizienz durch asymmetrische Blei-Calcium-Gitterstruktur.

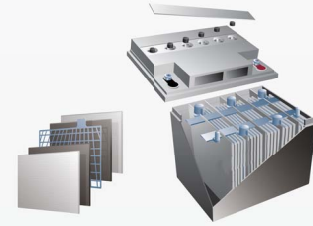
### SKIZZE - ABMASSE



### ABMASSE POLTYP: T2



### KONSTRUKTION (exemplarisch)



### Konstante Entladeleistung: Watt pro Block (25°C)

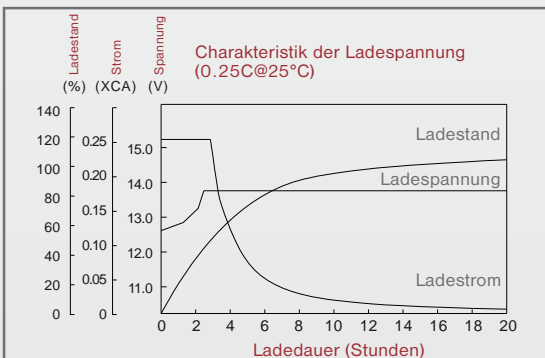
| F.V. (V/cell) \ Discharge Time | 5 Min | 10 Min | 15 Min | 20 Min | 30 Min | 40 Min | 50 Min | 60 Min | 120 Min |
|--------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|---------|
| 1.80V                          | 225.5 | 154.0  | 111.5  | 95.2   | 72.4   | 55.0   | 46.0   | 40.5   | 22.3    |
| 1.70V                          | 269.5 | 171.9  | 121.3  | 100.8  | 75.4   | 57.1   | 47.4   | 41.4   | 22.7    |
| 1.60V                          | 288.8 | 180.8  | 126.8  | 104.5  | 77.0   | 58.4   | 48.4   | 42.1   | 23.1    |
| 1.50V                          | 297.0 | 184.3  | 129.6  | 106.2  | 78.0   | 59.2   | 49.0   | 42.5   | 23.2    |
| 1.40V                          | 302.5 | 186.8  | 131.0  | 107.1  | 78.5   | 59.5   | 49.4   | 42.8   | 23.3    |
| 1.30V                          | 305.3 | 188.4  | 132.0  | 107.8  | 79.0   | 59.8   | 49.6   | 42.9   | 23.3    |

### Konstanter Entladestrom: Ampere pro Block (25°C)

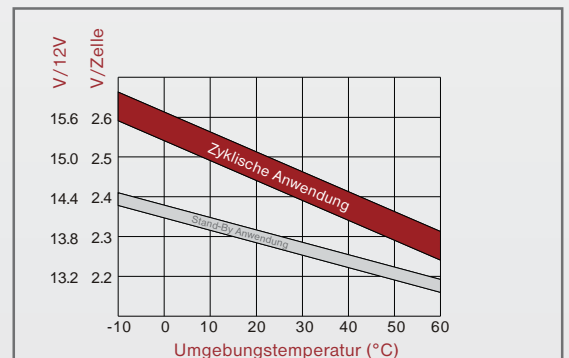
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|--------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|---------|
| 1.80V                          | 20.13 | 13.51  | 9.65   | 8.16   | 6.14   | 4.63   | 3.85   | 3.38   | 1.86    |
| 1.70V                          | 24.50 | 15.08  | 10.49  | 8.64   | 6.39   | 4.80   | 3.97   | 3.45   | 1.89    |
| 1.60V                          | 26.25 | 15.86  | 10.97  | 8.96   | 6.53   | 4.91   | 4.05   | 3.51   | 1.93    |
| 1.50V                          | 27.00 | 16.17  | 11.21  | 9.11   | 6.61   | 4.98   | 4.10   | 3.54   | 1.93    |
| 1.40V                          | 27.50 | 16.39  | 11.33  | 9.19   | 6.65   | 5.00   | 4.13   | 3.57   | 1.94    |
| 1.30V                          | 27.75 | 16.53  | 11.42  | 9.25   | 6.69   | 5.03   | 4.15   | 3.58   | 1.94    |

### KENNLINIEN

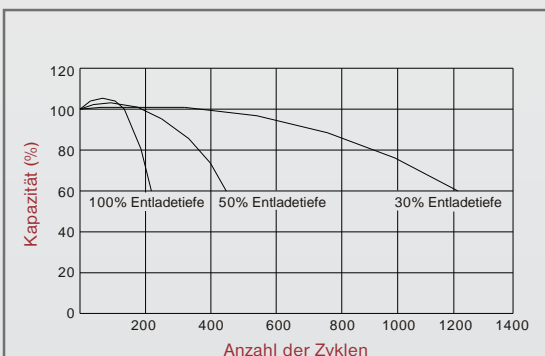
#### Ladecharakteristik



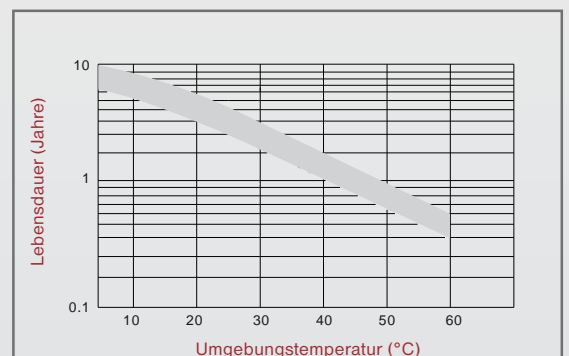
#### Verhältnis zwischen Ladespannung und Temperatur



#### Zyklen im Verhältnis zur Entladetiefe



#### Auswirkung der Temperatur auf die Lebensdauer



## SBYH-AGM-12-5.5 // 12V 5.5Ah

### AGM - Sealed Lead Acid battery for Standby-and High current Applications

Maintenance-free AGM Sealed Lead Acid batteries by battery-direct work with the Absorbent Glass Mat Technology, where the electrolyte is ligated in glass fibre mats. AGM Sealed Lead Acid batteries are leak proof and report an above-average high lead level of purity of 99,9%.



#### SPECIFICATION

|                                    |                                  |          |           |
|------------------------------------|----------------------------------|----------|-----------|
| Nominal voltage                    | 12 V                             |          |           |
| Capacity                           | 5.5 Ah (C20)                     |          |           |
| Weight                             | 1.62 kg                          |          |           |
| Dimensions (LxWxH)                 | 90x70x101 (107) mm               |          |           |
| Terminal                           | T2                               |          |           |
| Case material                      | ABS (UL94:HB)                    |          |           |
| Internal resistance                | < 27mΩ                           |          |           |
| Max. Discharge current             | 75 A (5 sec)                     |          |           |
| Max. Charging current              | 1.5 A                            |          |           |
| Floating charge voltage (20°C)     | 13.65 V (± 1%)                   |          |           |
| Lifespan                           | 6 to 9 years acc. EUROBAT (20°C) |          |           |
|                                    | up to 5 years (25°C)             |          |           |
| Capacitance loss per month at 20°C | < 3%*                            |          |           |
| Operating temperature area         | Storage                          | Charge   | Discharge |
|                                    | -20~60°C                         | -10~60°C | -20~60°C  |
|                                    | 8 per Box / 560 per Palette      |          |           |

#### SECURITY

##### Valves

In order to balance the gas pressure, each cell is provided with a low pressure valve that closes after opening.

##### Gassing

VRLA Batteries lay freely hydrogen gas which in combination with air can compose an explosive mixture. Do not storage in gas density casing.

##### Installation

Can be installed and operated in any position. However, a permanent operating and loading overhead should be avoided.

##### Transport

battery-direct batteries are no dangerous goods and are not subjected to any transport restrictions (Rail, Road, Water and Air)

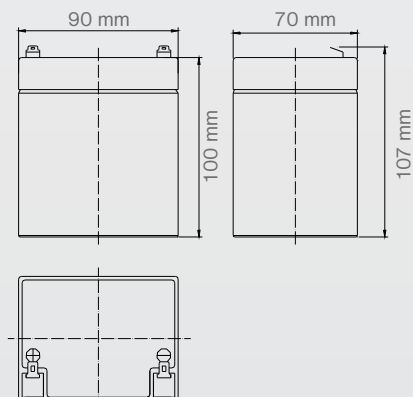


\* Attention self-discharge! Re-charge latest at voltage 12.6V.

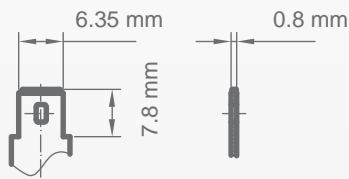
#### CHARACTERISTICS

- ✓ AGM-Technology (Absorbent Glass Mat) for a leak-proof operation.
- ✓ Long Lifespan and above-average many cycles (Charging-Discharging) through high-quality materials (e.g. 99,9% pure lead) and accurate handling.
- ✓ Ideal Material adjustment for maximum performance through Glass mat-separators with maximum absorptance and balanced electrolyte.
- ✓ High capacity through tin sulphate.
- ✓ Efficient Gas-Recombination (until 99%) through ideal size discs.
- ✓ High efficiency through asymmetric Lead-Calcium-Grid structure.

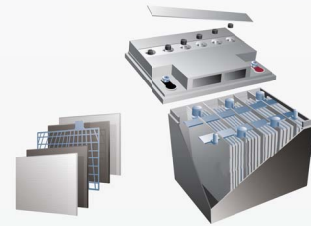
#### DRAFT-DIMENSIONS



### DIMENSIONS Terminal: T2



### CONSTRUCTION (exemplary)



### Constant unload performance: Watt per cell (25°C)

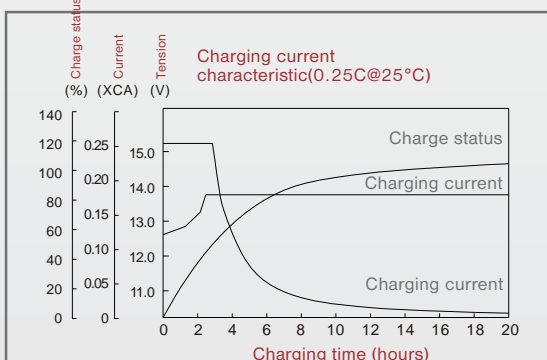
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### Constant discharge current: Ampere per cell (25°C)

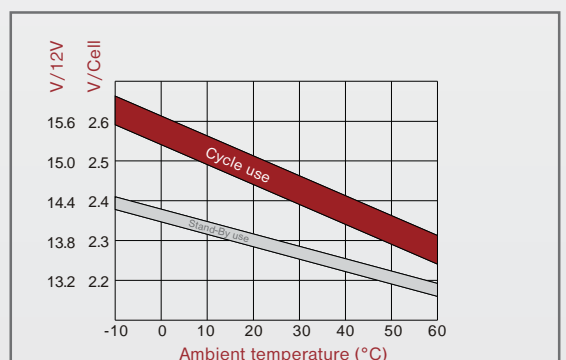
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### HEAD CURVES

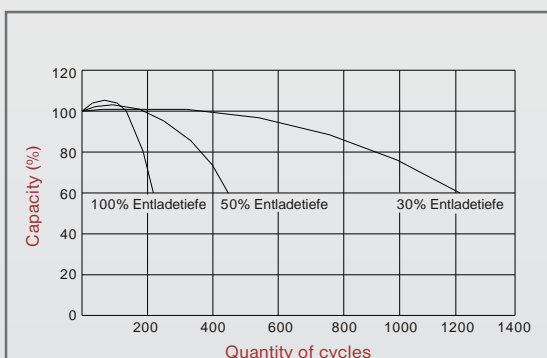
#### Charging characteristic



#### Relation between charging current and temperature



#### Cycles in relationship to discharge



#### Impact of the temperature on lifespan

