SBYH-AGM-12-20 // 12V 20Ah

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	20 Ah (C20)		
Gewicht	6.5 kg		
Abmaße (lxbxh)	181x77x167 mm		
Poltyp	B1		
Gehäusematerial	ABS (UL.94:HB)		
	ABS (UL.94:V0) optional		
Innenwiderstand	< 9mΩ		
Max. Entladestrom	280 A (5 sec)		
Max. Ladestrom	7 A		
Schwebeladespannung (20°C)	13.65 V (± 1%)		
Lebensdauer (25°C)	bis zu 5 Jahren		
Kapazitätsverlust pro Monat bei 20°C	3%*		
Betriebstemperatur-Bereich	Lagerung -20~60°C	Ladung -10~60°C	Entladung -20~60°C
Verpackungseinheit	1 pro Box / 144 pro Palette		

SICHERHEIT

Ventile
Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niedrigdruckventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung
VRLA Batterien setzen Wasserstoffgas frei, das in Verbindung mit Luft eine explosive Mischung bilden kann. Nicht in gasdichten Gehäusen lagern.

Einbau
Kann in beliebiger Lage installiert und betrieben werden. Jedoch sollte ein dauerhafter Betrieb und Laden über Kopf vermieden werden.

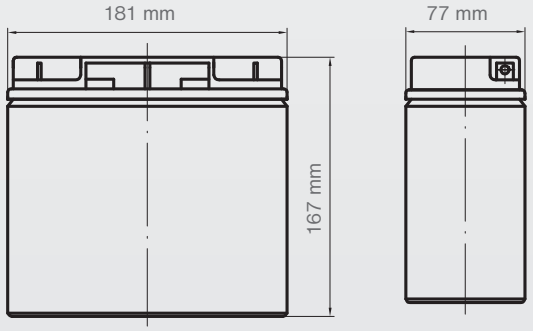
Transport
battery-direct Batterien sind kein Gefahrgut und unterliegen keiner Transportbeschränkung (Schiene, Straße, Wasser und Luft).

* 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.

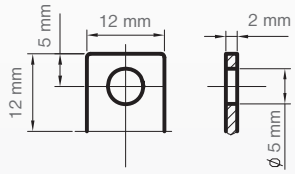
SKIZZE - ABMASSE



Konstanter Entladestrom: Ampere pro Zelle (25°C)

Volt/Zelle \ Zeit	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	60min
1.60	98.6	68.3	53.3	42.0	35.3	30.7	27.2	24.6	22.5	20.4	18.8	17.4
1.65	92.8	64.6	50.5	39.9	33.4	29.2	25.8	23.3	21.4	19.5	17.9	16.6
1.70	86.9	60.9	47.8	37.7	31.6	27.6	24.5	22.1	20.3	18.5	17.0	15.8
1.75	81.0	57.2	45.0	35.5	29.8	26.0	23.1	20.9	19.2	17.5	16.1	15.0
1.80	77.6	55.1	43.4	34.4	28.9	25.3	22.5	20.4	18.7	17.1	15.8	14.6

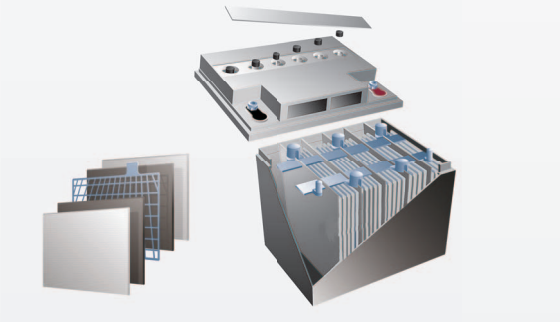
POLTYP: B1 (M5 Schraube und Mutter)



Konstante Entladeleistung: Watt pro Zelle (25°C)

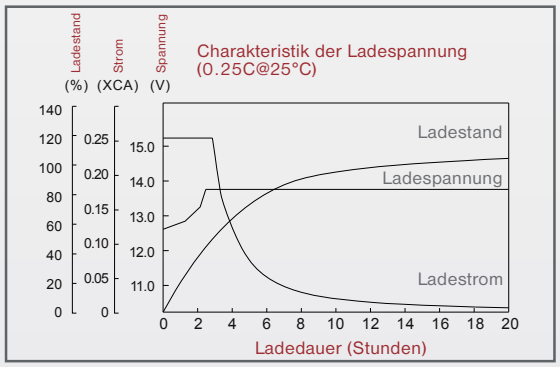
Volt/Zelle \ Zeit	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	60min
1.60	167	116	90.8	72.0	60.7	53.2	46.9	42.2	38.6	35.5	32.9	30.8
1.65	160	112	87.6	69.6	58.7	51.5	45.4	40.9	37.4	34.4	32.0	30.0
1.70	153	107	84.4	67.1	56.7	49.8	44	39.6	36.2	33.4	31.1	29.1
1.75	146	103	81.3	64.7	54.7	48.0	42.5	38.3	35.1	32.3	30.1	28.3
1.80	139	98.6	78.1	62.2	52.7	46.3	41.0	37.0	33.9	31.3	29.2	27.4

KONSTRUKTION (exemplarisch)

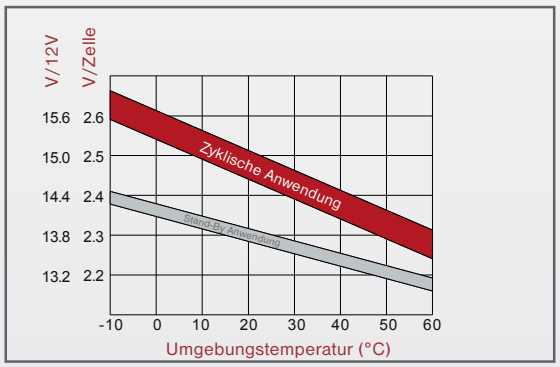


KENNLINIEN

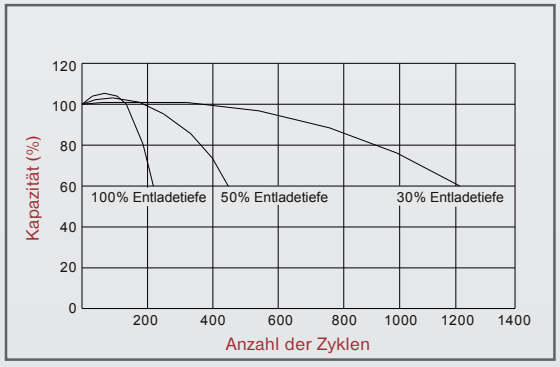
Ladecharakteristik



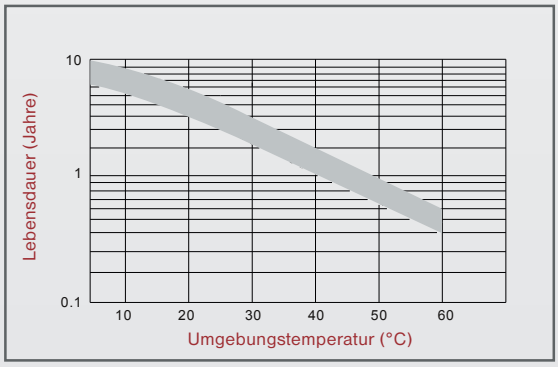
Verhältnis zwischen Ladespannung und Temperatur



Zyklen im Verhältnis zur Entladetiefe



Auswirkung der Temperatur auf die Lebensdauer



SBYH-AGM-12-20 // 12V 20Ah

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

Quality high class and particular balanced components characterise this Battery-Series. This battery is therefore suitable for several applications, as e.g. for those which require a lot of energy within a short time.

SPECIFICATION

Nominal voltage	12 V		
Capacity	20 Ah (C20)		
Weight	6.5 kg		
Dimensions (LxWxH)	181x77x167 mm		
Terminal	B1		
Case material	ABS (UL.94:HB)		
	ABS (UL.94:V0) optional		
Internal resistance	< 9mΩ		
Max. Discharge current	280 A (5 sec)		
Max. Charging current	7 A		
Floating charge voltage (20°C)	13.65 V (± 1%)		
Life period (25°C)	until 5 years		
Capacitance loss per month at 20°C	3%*		
Operating temperature area	Storage -20~60°C	Charge -10~60°C	Discharge -20~60°C
Packing unit	1 per Box / 144 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.

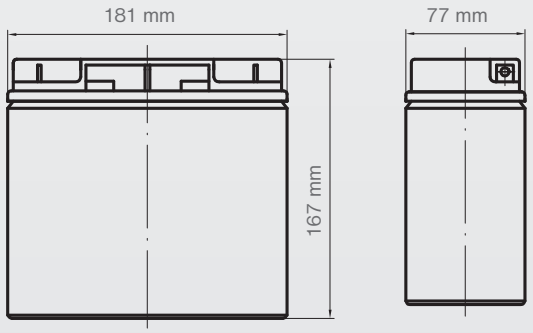
Transport
battery-direct batteries are no dangerous goods and are not subjected to any transport restrictions (Rail, Road, Water and Air)

* 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.

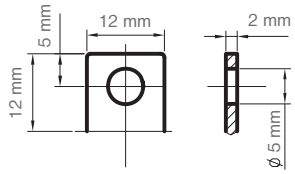
DRAFT-DIMENSIONS



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

Volt/Cell \ Time	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	60min
1.60	98.6	68.3	53.3	42.0	35.3	30.7	27.2	24.6	22.5	20.4	18.8	17.4
1.65	92.8	64.6	50.5	39.9	33.4	29.2	25.8	23.3	21.4	19.5	17.9	16.6
1.70	86.9	60.9	47.8	37.7	31.6	27.6	24.5	22.1	20.3	18.5	17.0	15.8
1.75	81.0	57.2	45.0	35.5	29.8	26.0	23.1	20.9	19.2	17.5	16.1	15.0
1.80	77.6	55.1	43.4	34.4	28.9	25.3	22.5	20.4	18.7	17.1	15.8	14.6

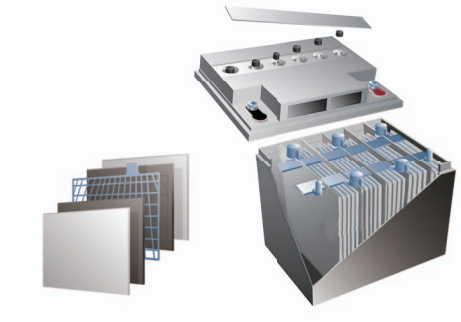
Terminal: B1 (Fitting M5 bolt and nut)



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

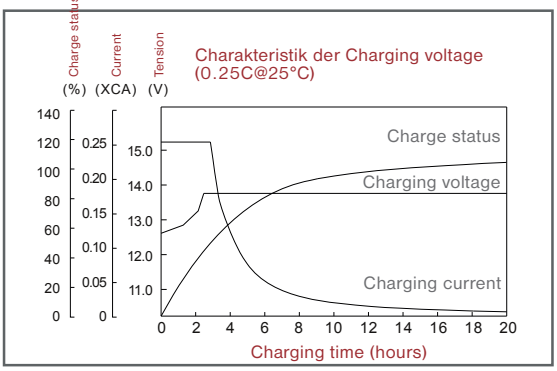
Volt/Cell \ Time	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	60min
1.60	167	116	90.8	72.0	60.7	53.2	46.9	42.2	38.6	35.5	32.9	30.8
1.65	160	112	87.6	69.6	58.7	51.5	45.4	40.9	37.4	34.4	32.0	30.0
1.70	153	107	84.4	67.1	56.7	49.8	44	39.6	36.2	33.4	31.1	29.1
1.75	146	103	81.3	64.7	54.7	48.0	42.5	38.3	35.1	32.3	30.1	28.3
1.80	139	98.6	78.1	62.2	52.7	46.3	41.0	37.0	33.9	31.3	29.2	27.4

CONSTRUCTION (exemplary)

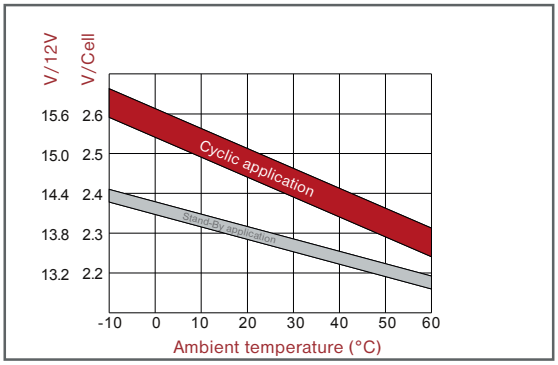


HEAD CURVES

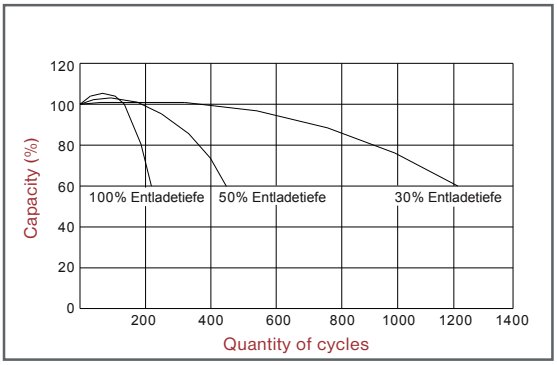
Charging characteristic



Relation between charging current and temperature



Cycles in relationship to discharge



Impact of the temperature on lifespan