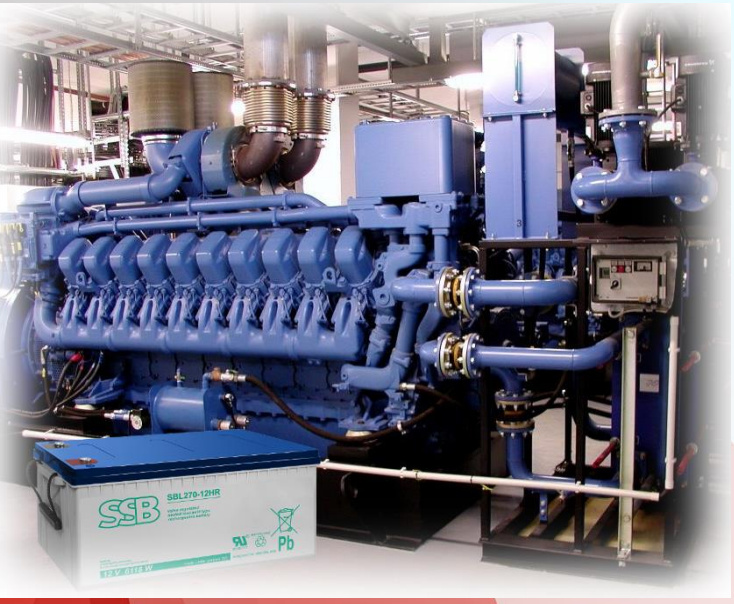
DFA

+ Dierk Franke Akkumulatoren GmbH –

Since 1992

Baureihe SBL



AGM Batterien – LONG LIFE REALITY

Wartungsfreie Pb-Akkumulatoren für die härtesten Anforderungen – bis zu 12 Jahren

SCAN ME

AGM-Batterien

Die SBL-Baureihe in AGM-Technologie steht für allerhöchste Ansprüche. Die Anwendung dieser Baureihe ist absolut spezialisiert für folgende Einsatzbereiche:

- **Zentralbatterieanlagen** nach DIN VDE 0108-100 / DIN EN 50181 + 50272
- **Dieselstarteranwendungen** nach DIN VDE 0510 / 0108
- **Gleichstromversorgungsanlagen**
- **USV-Anlagen** aller Art

Sicherheitsbeleuchtung / Zentralbatterieanlagen / Sicherheitslichtgeräte
Stationäre Ersatzstromanlagen in Kraftwerken und Unterstationen
Gruppenversorgungsgeräte & **Notlicht**versorgungsgeräte
Robotersysteme, Automationstechnik
LPS-Systeme (LowPower-Systeme)
Gefahr- und Rauchmeldeanlagen
Funk- und Radiosysteme
Informationstechnologie
Fernmess-Systeme
Telekommunikation
Schaltanlagen
Signalanlagen
BEV-Anlagen

Der hohe Qualitätsanspruch wird gehalten durch:

Zertifizierung nach ISO 9001 und ISO 14001
Weitere Akkreditierungen nach UL und IEC Normen.
Umfangreiche Endprüfung der Produkte vor jeder Auslieferung
Anlagenlieferung aus einer Fertigungscharge (Gewährleistung gleichmäßiger Innenwiderstände aller Batterieblöcke, somit sind alle Batterieplatten gleich und auf einer (Arbeits-)Ebene – Die optimalste Linie die man in der Produktion überhaupt erreichen kann.)

Produktinformation - Technische Eigenschaften

Ein **VRLA**-Akkumulator (engl. valve-regulated lead-acid **battery** „ventilgeregelte Blei-Säure-**Batterie**“) ist ein Bleiakkumulator in verschlossener Bauform. Der Akkumulator ist mit einem Überdruck-Sicherheitsventil ausgestattet, dass sich nur im Störungsfall öffnet. Hervorragende Hochstromfähigkeit durch geringen Innenwiderstand. Hohe Leistungsdichte, geringer Platzbedarf und absolut wartungsfrei über die gesamte Lebensdauer. Geringe Selbstentladerate: Bis zu 12 Monate lagerfähig unter normalen Bedingungen. Gebrauchsdauer nach EUROBAT 10-12 Jahre im Bereitschaftsparallelbetrieb.
Keine Transportbeschränkungen (nach IATA, DGR, Satz A67)

AGM Batterien – LONG LIFE REALITY

Wartungsfreie Pb-Akkumulatoren für die härtesten Anforderungen – bis zu 12 Jahren

Vorteile im Überblick

Verschlossen und sicher & **Qualität**

Durch Nutzung von einzigartigen Konstruktions- und Versiegelungstechniken, sowie durch die neueste Technologie beim Glasfaservlies wird bei SBL Batteriebaureihe einem vorzeitigen Austrocknen vorgebeugt und die Gebrauchsdauer erheblich verlängert. Die SBL-Baureihe ist gemäß ISO 9001 und ISO 14001 Normen hergestellt und hat weitere Akkreditierungen nach UL und IEC Normen.

Wartungsfrei

Bei der SBL-Baureihe handelt es sich um verschlossene und wartungsfreie Blei-Akkumulatoren mit der neuesten AGM-Technologie.

Hohe Lebensdauer

Die SBL-Baureihe hat eine längere Lebensdauer (nach Eurobat 10-12 Jahre) und eine höhere Ausdauer, selbst bei starker Überladung. Sie sind extrem gasungsarm durch interne Gasrekombination, welche höher als 99% ist. Das Standardgehäusematerial ist schwer entflammbar gemäß der UL94 Norm.

Besonderheit I - die diese Batterie(baureihe) auszeichnet – wie keine andere

Sie erhalten mit der Batterielieferung einen Zertifikations-Beleg (schriftliche Bescheinigung über den Innenwiderstand der gelieferten Batterie). Nachweis das die Batterieblöcke aus einer Fertigungs-charge stammen und so sichergestellt werden kann, dass die Innenwiderstände aller Batterieblöcke gleich sind. – Die optimalste Linie die man in der Produktion überhaupt erreichen kann. Ein Zusammenwürfeln unterschiedlicher Chargen bringt Probleme innerhalb der Batteriestränge und erhebliche Einbußen bei der Lebensdauer. Gleicher Innenwiderstand bedeutet; sauberer fließender Strom und ein störungsfreier Batteriebetrieb bei der Auf- und Entladung und zwar ab dem 1. Tag!

Besonderheit II

Ab 18 Batterieblöcken und mehr erhalten Sie ein frisches Verbinderpaket (Block-, Reihen- und Etagenverbinder) kostenlos bei Ihrer Lieferung dabei. Ab 4 Blöcken wird 1 Satz +/- Kennzeichnungsaufkleber & Batterienummernaufkleber ebenfalls kostenlos dabei gepackt. Der Batterieanlagenaufkleber ist ebenfalls ab 4 Blöcke pro Lieferung dabei.

Zyklenfestigkeit

Die SBL-Baureihe kann, je nach Entladetiefe, bis zu 400 Lade-/Entladezyklen erreichen.

Breiter Temperaturbereich & **Lagerung**

Die SBL-Baureihe kann auch in einem breiten Temperaturbereich von -15°C bis +50°C eingesetzt werden. Die optimale Betriebstemperatur liegt bei 20° C. Alle anderen Temperaturen gehen zu Lasten der Lebensdauer. Die SBL-Baureihe hat eine extrem niedrige Selbstentladungsrate von unter 1 % monatlich (bei 20°C). Sie können bis zu 12 Monate bei normaler Umgebungstemperatur (18-20°C) gelagert werden. Danach empfehlen wir, wie vor jeder Inbetriebnahme, eine Nachladung vorzunehmen.

Produktmerkmale

- Besonders lange Gebrauchsdauer im Stand-By Betrieb, nach EURO-BAT 10-12 Jahre
- AGM Batterien (Absorbent Glass Mat technology)
- geringe Selbstentladung, absolut wartungsfrei
- Lagerfähigkeit bis 12 Monate
- schlag- und bruchfestes Kunststoffgehäuse aus ABS
- Elektrolyt in Glasfaservlies gebunden
- wartungsfreier Betrieb in jeder Lage, ausgenommen kopfüber

DFA /SSB Typ / Type	Spg. Volt V/Block v/block	Nennkapazität Ah / C10 Cap. Ah/10h	Entladeströme in Ampere bei Us 1,80V/Zelle 1h	 3h	 8h	Abmessungen dimensions L x B x H mm	Anschlüsse Pole /pol	Gewicht kg	Verbinder-Querschnitt mm²
SBL 7,2-12L	12	7,2	4,04	1,64	0,8	151 x 65 x 94/101	T2 /6,35mm	2,2	4,0
SBL 9-12L	12	9	4,76	2,25	1,03	151 x 65 x 94 mm	T2 /6,35mm	2,6	4,0
SBL 12-12L	12	12	7,75	3,06	1,37	151 x 65 x 95/101	T2 /6,35mm	3,7	4,0
SBL 18-12i	12	18	10,9	4,27	2,0	181 x 77 x 167/167	M5	5,3	16,0
SBL 26-12i	12	26	13,5	5,78	2,78	166 x 175 x 125/125	M5	8,1	16,0
SBL 28-12i	12	28	16,4	6,87	3,41	165 x125 x 175/182	M5	8,5	16,0
SBL 33-12i	12	33	19,8	8,18	3,92	195 x130 x 155/168	M6	9,7	16,0
SBL 40-12i	12	40	23,5	9,43	4,78	197 x165 x 170/170	M6	13,8	16,0
SBL 55-12i	12	55	33,3	13,8	6,6	229 x138 x 208/213	M6	18,0	16,0
SBL 60-12i (sh)	12	60	36,5	14,7	7,26	260 x166 x 206/215	M6	20,7	16,0
SBL 65-12i	12	65	41,0	16,9	8,2	350 x167 x 179/179	M6	20,4	16,0
SBL 75-12i (sh)	12	75	44,3	20,1	9,22	258 x166 x 210/215	M6	24,0	16,0
SBL 80-12i	12	80	46,3	20,7	9,68	350 x167 x 179/179	M6	22,5	16,0
SBL 100-12 (sh)	12	100	57,1	22,8	12,0	330 x171 x 215/222	M8	29,0	25,0
SBL 120-12 (sh)	12	120	65,4	26,3	14,0	330 x171 x 215/222	M8	32,5	25,0
SBL 134R-12i	12	134	78,0	35,2	16,1	341 x173 x 283/287	M8	40,0	25,0
SBL 150-12i	12	150	87,2	36,7	17,6	482 x170 x 240/240	M8	44,8	25,0
SBL 200-12i	12	200	117	45,7	24,2	522 x238 x 218/223	M8	59,1	35,0
SBL 260-12 (sh)	12	260	142	64,2	29,8	520 x240 x 221/227	M8	74,0	35,0
SBL 260-12 i	12	260	141,3	65,1	29,8	520 x269 x 211/227	M8	74,0	35,0

SSB SBL 7.2-12L (12V 7.2AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (20hr / 20°C / 1.75 V/C)	20 hour rate (0.36A, 10.5V)	7.2Ah
	10 hour rate (0.69A, 10.5V)	6.7Ah
	5 hour rate (1.16A, 10.5V)	5.6Ah
	1 hour rate (4.80A, 9.6V)	4.6Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤19 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	151 / 5.94
	Width (mm / inch)	65 / 2.56
	Height (mm / inch	94 / 3.70
	Total Height (mm / inch)	100 / 3.94
Approx. Weight (Kg / lbs)	2.20 / 4.84	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	105A(5s)	
Short Circuit Current	350A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.30-2.35VPC
	Maximum charging current	2.88A
	Temperature compensation	-30mV/°C
	Standby use	2.23-2.27VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

MH45680 | ISO14001 | Intertek ETL SEMKO

ISO9001

Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

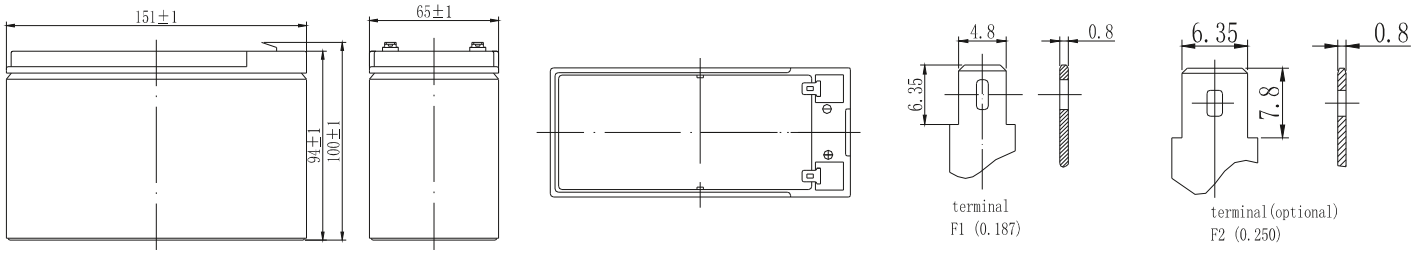
End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	30.0	18.8	15.3	8.50	4.80	1.88	1.25	0.71	0.38
1.65V	28.4	17.9	14.6	8.15	4.63	1.82	1.20	0.70	0.38
1.70V	26.8	17.0	13.9	7.86	4.44	1.76	1.16	0.70	0.37
1.75V	25.2	16.0	13.2	7.56	4.25	1.69	1.12	0.69	0.36
1.80V	23.5	15.1	12.5	7.18	4.04	1.64	1.10	0.67	0.35

Discharge Constant Current (Watts at 68°F20°C)

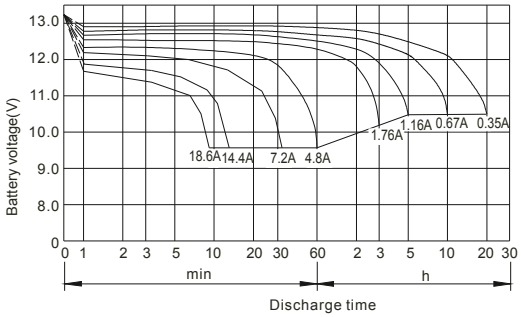
End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	53.3	35.8	28.1	15.5	11.8	9.30	5.13	3.68	2.38
1.65V	50.7	34.0	27.0	14.9	11.3	8.90	5.02	3.59	2.34
1.70V	48.1	32.2	25.9	14.3	10.8	8.53	4.89	3.49	2.30
1.75V	45.6	30.4	24.8	13.7	10.4	8.28	4.73	3.38	2.25
1.80V	43.1	28.6	23.8	13.2	10.0	7.90	4.58	3.27	2.19

Updated: 04.04.2019

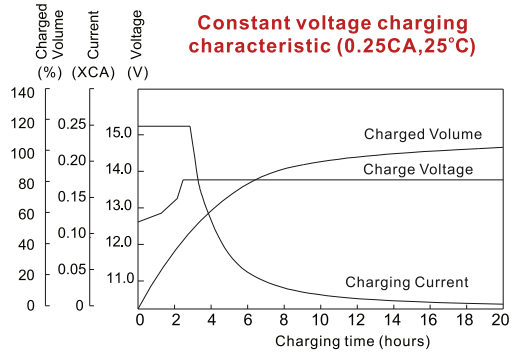
Dimensions



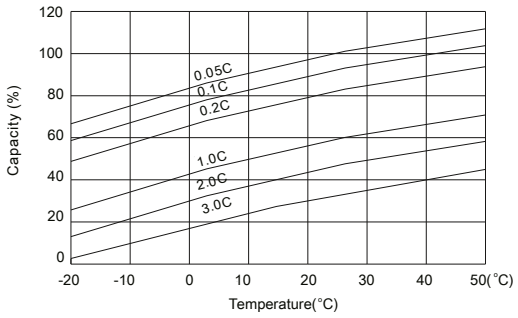
Discharge Characteristics



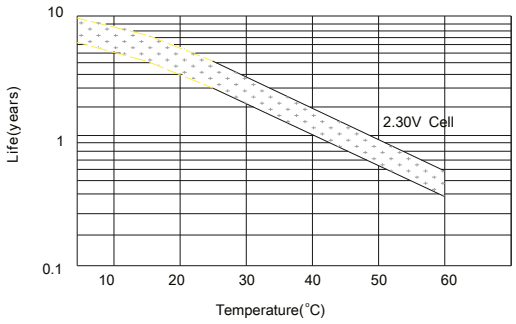
Float Charging Characteristics



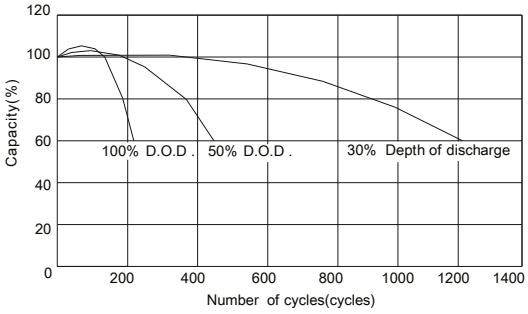
Temperature Effects in Relation to Battery Capacity



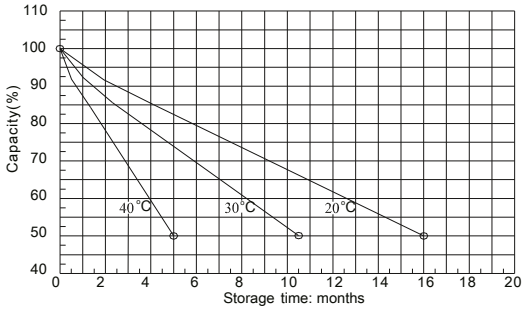
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

DFA
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SSB

SBL9-12L (12V9Ah)

Applications

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Alarm and security system
- Communication power supply
- DC power supply

Certificates

ISO 9001 Conform to IEC60896-21&22

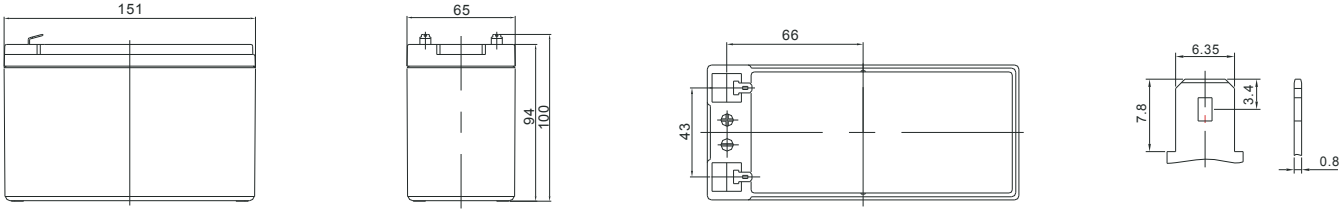
Specifications

Nominal Voltage	12V
Nominal Capacity	9Ah (C_{20}, 10.5V)
Approx. Weight	2.55kg
Terminal	T2
Container Material	ABS UL94 HB/UL94 V0
Rated Capacity (20°C)	9.00Ah/0.45A, 20hr, 10.5V
	8.41Ah/0.84A, 10hr, 10.8V
	8.39/1.04A, 8hr, 10.5V
	7.85Ah/1.57A, 5hr, 10.5V
	6.96Ah/2.32A, 3hr, 10.5V
	4.95Ah/4.950A, 1hr, 10.5V
Max. Discharge Current	90A (5s)
Internal Resistance / Impedance (1kHz)	Approx. 21mΩ
Nominal Oper. Temp. R.	20±3°C

Operating Temp. Range	Discharge:	-20~50°C
	Charge:	-10~50°C
	Storage:	-20~50°C
Cycle Use	Initial Charging Current less than 2.7A.	
	Voltage 14.40V~14.7V at 20°C.	
	Temperature Coefficient -30mV/°C.	
Standby Use	No limit on Initial Charging Current.	
	Voltage 13.38V~13.8V at 20°C.	
	Temperature Coefficient -20mV/°C.	
Capacity affected by Temp.	40°C	103%
	25°C	100%
	0°C	86%
Self Discharge	SSB batteries may be stored for up to 6 months at 20°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Life Expectancy	10-12 years according to EUROBAT	

Dimensions

- **T2 Terminal**
  Unit: mm | Dimensions: 151 Length X 65 Width X 94 Height (100 Height incl. Terminal)



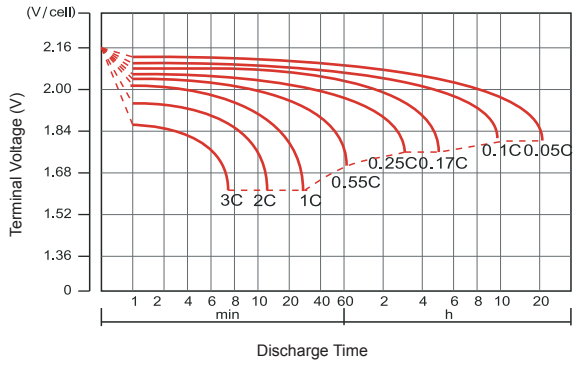
Constant Current Discharge (Amperes) at 20°C

F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	34.15	24.13	17.45	10.020	5.499	3.376	2.538	2.049	1.698	1.093	0.887	0.469
1.65V/cell	31.75	22.80	16.68	9.619	5.310	3.268	2.460	1.994	1.654	1.080	0.877	0.461
1.70V/cell	28.65	20.99	15.62	9.195	5.137	3.161	2.393	1.939	1.611	1.064	0.863	0.456
1.75V/cell	25.67	19.22	14.54	8.788	4.950	3.050	2.321	1.890	1.570	1.049	0.852	0.450
1.80V/cell	22.54	17.40	13.42	8.400	4.760	2.941	2.250	1.835	1.530	1.031	0.841	0.446
1.85V/cell	17.89	14.22	11.14	7.234	4.270	2.695	2.080	1.706	1.426	0.968	0.792	0.423

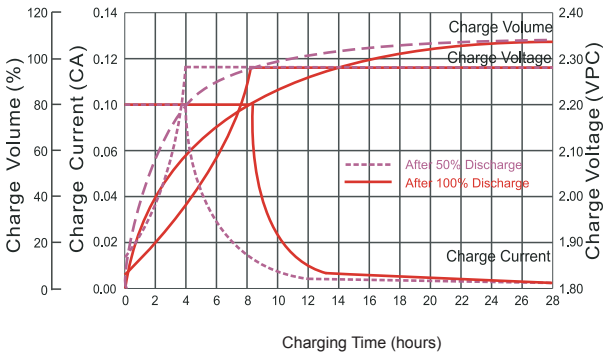
Constant Power Discharge (Watts/cell) at 20°C

F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	56.61	41.02	30.50	18.20	10.33	6.399	4.848	3.934	3.273	2.134	1.744	0.923
1.65V/cell	53.25	39.51	29.59	17.66	10.04	6.225	4.718	3.842	3.200	2.114	1.726	0.909
1.70V/cell	49.14	37.04	28.13	17.04	9.770	6.053	4.610	3.751	3.127	2.087	1.702	0.899
1.75V/cell	45.00	34.52	26.56	16.46	9.470	5.868	4.491	3.669	3.059	2.062	1.681	0.890
1.80V/cell	40.35	31.79	24.87	15.89	9.161	5.687	4.369	3.577	2.991	2.031	1.662	0.882
1.85V/cell	32.71	26.44	20.93	13.82	8.267	5.239	4.057	3.337	2.798	1.911	1.567	0.838

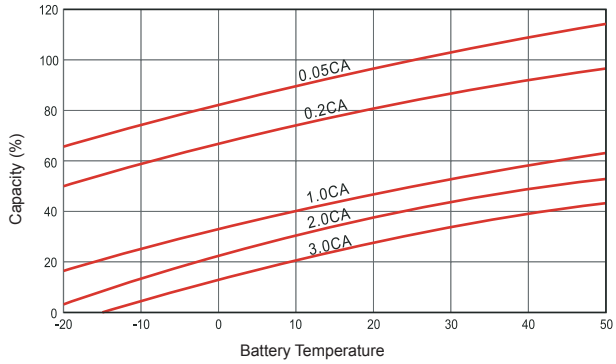
Discharge Characteristics



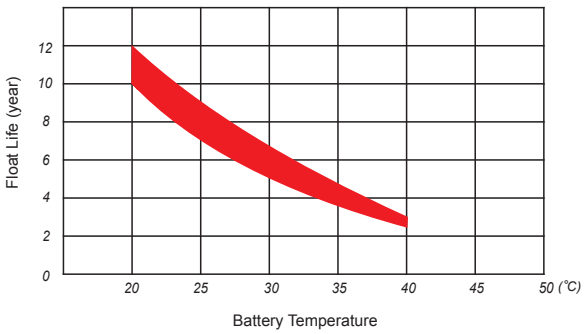
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



SSB SBL 12-12L (12V 12AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (20hr / 20°C / 1.75 V/C)	12.0AH	
	20 hour rate (0.60A, 10.5V)	12Ah
	10 hour rate (1.14A, 10.5V)	11.4Ah
	5 hour rate (2.05A, 10.5V)	10.25Ah
	1 hour rate (8.14A, 9.6V)	8.14Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤19 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	151 / 5.94
	Width (mm / inch)	98 / 3.86
	Height (mm / inch	95 / 3.74
	Total Height (mm / inch)	101 / 3.98
Approx. Weight (Kg / lbs)	3.67 / 8.01	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	180A(5s)	
Short Circuit Current	600A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	4.8A
	Temperature compensation	-30mV/°C
	Standby use	2.23-2.30VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

ISO14001 | intertek ETL SEMKO

ISO9001

Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

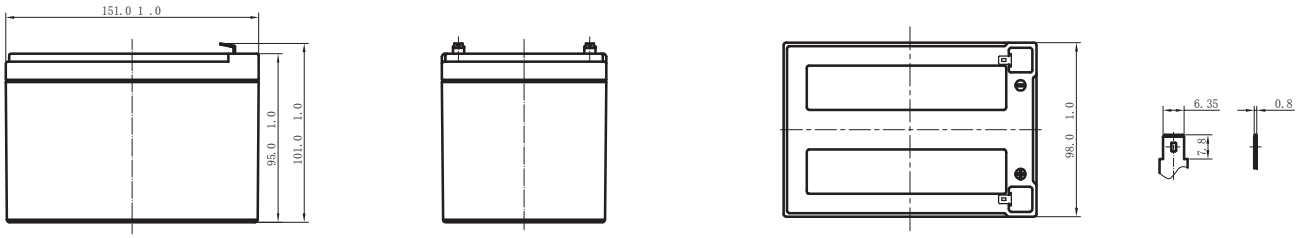
End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	46.4	31.7	24.8	13.8	8.14	3.18	2.12	1.18	0.61
1.65V	45.0	30.8	24.3	13.5	8.04	3.15	2.10	1.17	0.61
1.70V	43.5	29.9	23.7	13.3	7.94	3.12	2.07	1.16	0.61
1.75V	42.1	29.0	23.2	13.0	7.85	3.09	2.05	1.14	0.60
1.80V	40.6	28.2	22.6	12.7	7.75	3.06	2.02	1.12	0.59

Discharge Constant Current (Watts at 68°F20°C)

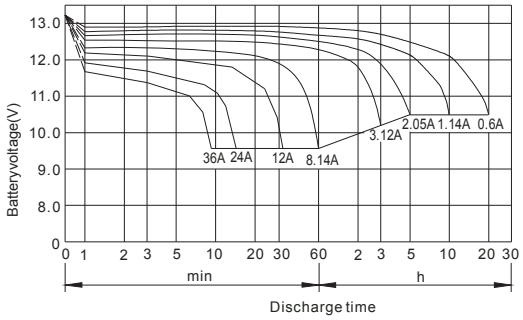
End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	86.2	58.7	46.7	27.0	20.6	16.1	8.50	6.50	4.20
1.65V	84.1	57.7	46.0	26.6	20.4	16.0	8.42	6.44	4.17
1.70V	81.9	56.6	45.3	26.2	20.1	15.8	8.33	6.37	4.14
1.75V	79.8	55.6	44.6	25.8	19.9	15.7	8.25	6.31	4.11
1.80V	77.6	54.6	43.9	25.4	19.6	15.5	8.16	6.24	4.08

Updated: 07.01.2019

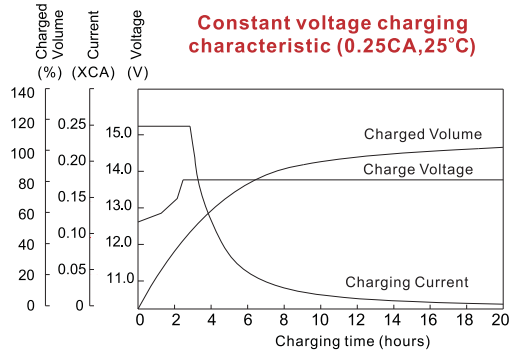
Dimensions



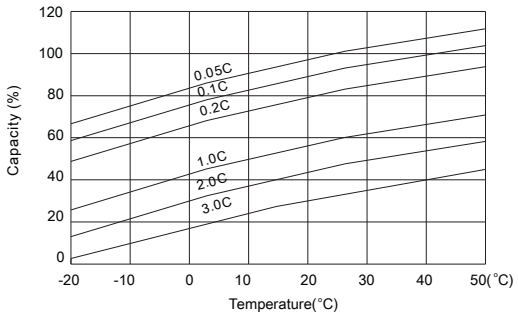
Discharge Characteristics



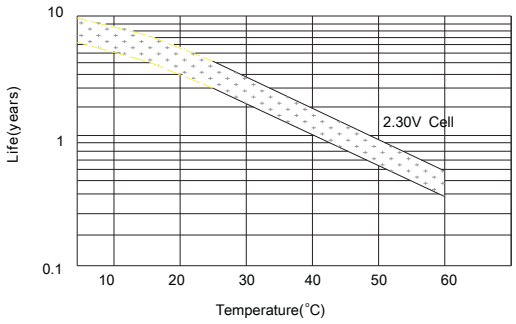
Float Charging Characteristics



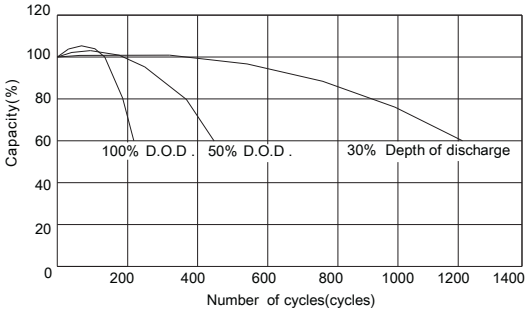
Temperature Effects in Relation to Battery Capacity



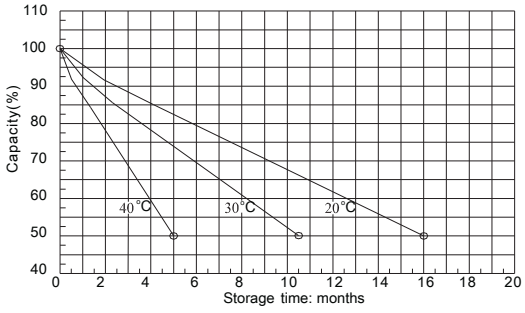
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 18-12i (12V 18AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (20hr / 20°C / 1.75 V/C)	18.0AH	
	20 hour rate (0.85A, 10.5V)	18Ah
	10 hour rate (1.68A, 10.5V)	16.8Ah
	5 hour rate (2.91A, 10.5V)	15.45Ah
	1 hour rate (11.8A, 9.6V)	11.8Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤16.5 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	181 / 7.13
	Width (mm / inch)	77 / 3.03
	Height (mm / inch	167 / 6.57
	Total Height (mm / inch)	167 / 6.57
Approx. Weight (Kg / lbs)	5.3 / 11.7	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~60°C Charge : -10~60°C Storage : -20~60°C	
Max. Discharge Current 68°F(20°C)	255A(5s)	
Short Circuit Current	850A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.30-2.35VPC
	Maximum charging current	6.8A
	Temperature compensation	-30mV/°C
	Standby use	2.23-2.30VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

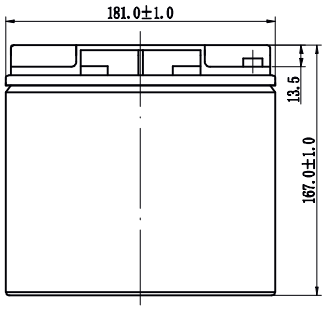
End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	64.9	44.1	34	19.8	11.8	4.57	3.09	1.78	0.89
1.65V	62.8	43	33.3	19.4	11.6	4.5	3.03	1.75	0.88
1.70V	60.5	41.9	32.6	18.9	11.4	4.42	2.97	1.72	0.87
1.75V	58	40.7	31.8	18.4	11.2	4.35	2.91	1.68	0.85
1.80V	55.3	39.4	30.9	17.9	10.9	4.27	2.84	1.65	0.84

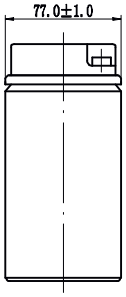
Discharge Constant Current (Watts at 68°F20°C)

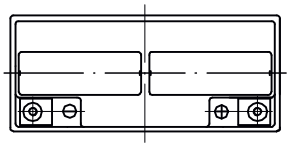
End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	111	78.6	61.3	35.3	27.4	22.4	13.0	9.09	6.13
1.65V	107	77.2	60.2	34.8	27.1	22.2	12.9	9.01	6.07
1.70V	103	75.8	59.0	34.3	26.8	22.0	12.8	8.92	6.01
1.75V	98.0	74.3	57.8	33.7	26.4	21.7	12.7	8.83	5.95
1.80V	94.0	72.8	56.5	33.1	26.0	21.5	12.5	8.74	5.88

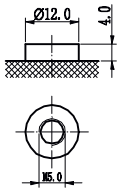
Updated: 07.01.2019

Dimensions

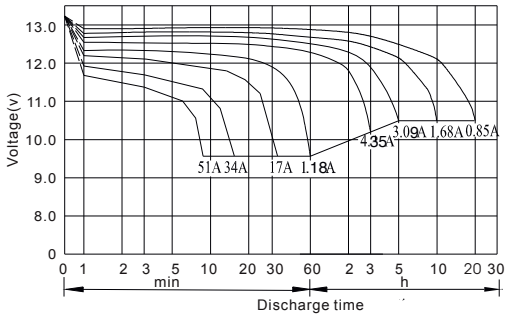




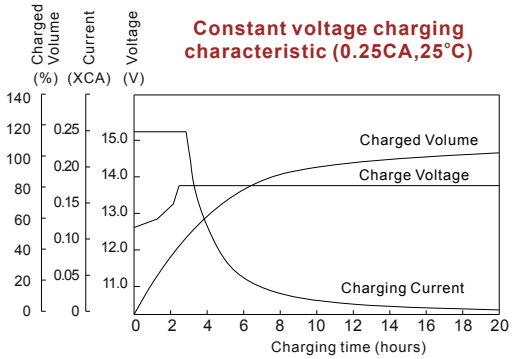




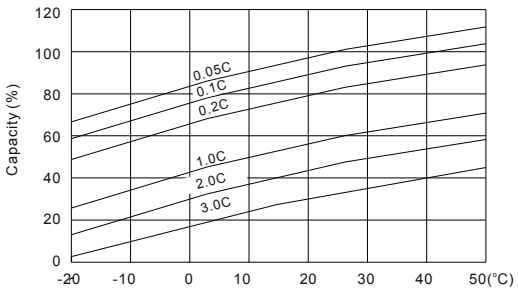
Discharge Characteristics



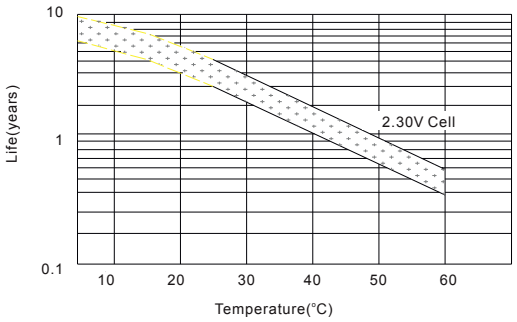
Float Charging Characteristics



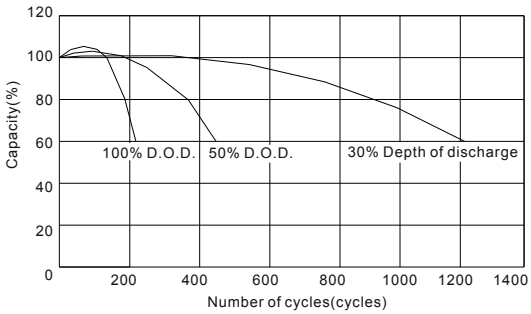
Temperature Effects in Relation to Battery Capacity



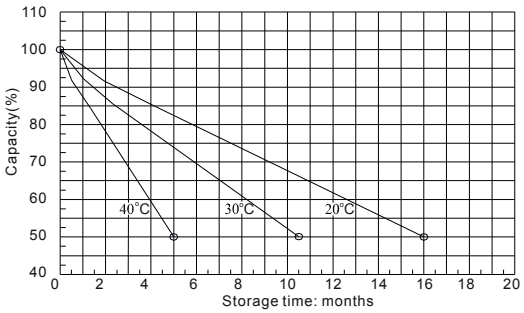
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 26-12i (12V 26AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.75 V/C)	10 hour rate (1.68A, 10.5V)	26.0Ah
	5 hour rate (2.91A, 10.5V)	20.5Ah
	1 hour rate (11.8A, 9.6V)	16Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤12 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	166 / 6.54
	Width (mm / inch)	175 / 6.89
	Height (mm / inch	125 / 4.92
	Total Height (mm / inch)	125 / 4.92
Approx. Weight (Kg / lbs)	8.1 / 17.8	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~60°C Charge : -10~60°C Storage : -20~60°C	
Max. Discharge Current 68°F(20°C)	300A(5s)	
Short Circuit Current	1200A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	9.6A
	Temperature compensation	-30mV/°C
	Standby use	2.23-2.30VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

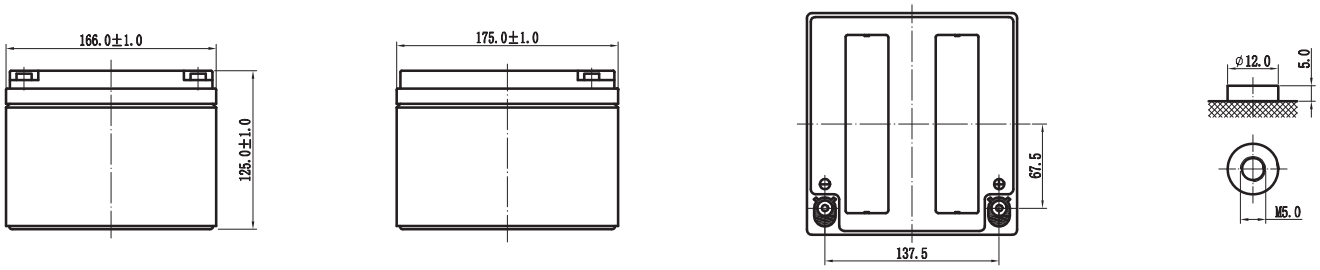
End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	95.0	64.0	48.0	28.5	16.0	6.74	4.47	2.52	1.24
1.65V	90.1	60.9	45.9	27.4	15.4	6.53	4.36	2.47	1.23
1.70V	84.9	57.8	43.7	26.2	14.8	6.30	4.24	2.42	1.22
1.75V	79.7	54.5	41.1	24.9	14.2	6.05	4.10	2.37	1.20
1.80V	74.3	51.3	39.1	23.6	13.5	5.78	3.95	2.31	1.18

Discharge Constant Current (Watts at 68°F20°C)

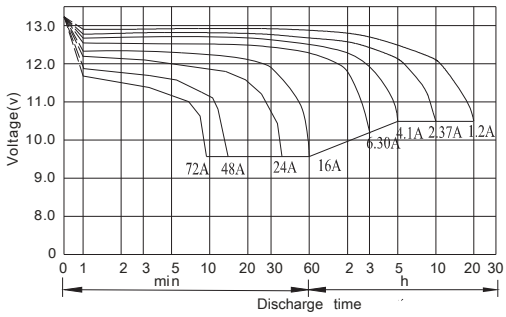
End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	185	121	90.0	55.0	40.0	31.7	19.6	13.4	8.54
1.65V	173	114	85.1	52.3	38.2	30.3	19.0	13.1	8.39
1.70V	161	107	80.2	49.4	36.3	28.9	18.3	12.5	8.22
1.75V	151	99.7	75.2	46.6	34.3	27.5	17.6	12.0	8.03
1.80V	139	92.7	70.3	43.7	32.3	26.0	16.9	11.4	7.83

Updated: 19.02.2019

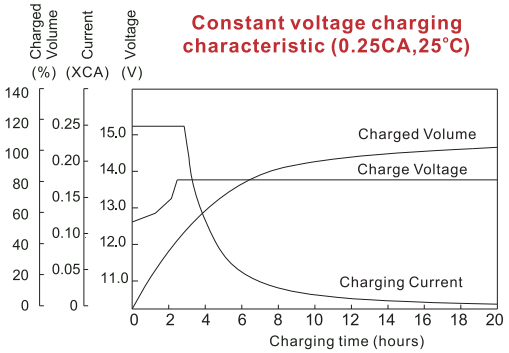
Dimensions



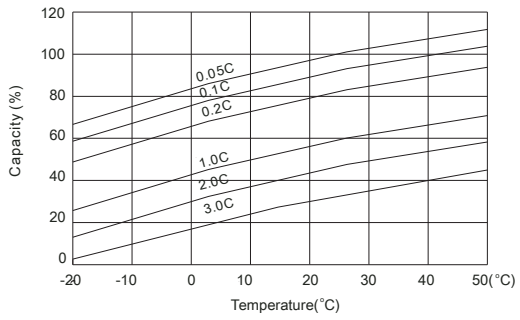
Discharge Characteristics



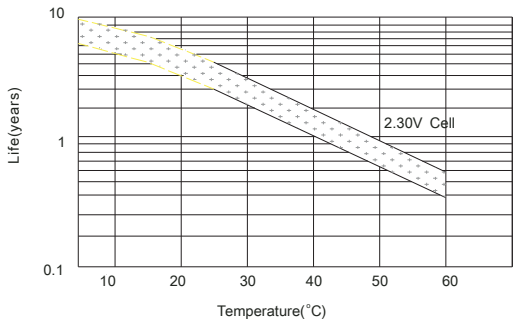
Float Charging Characteristics



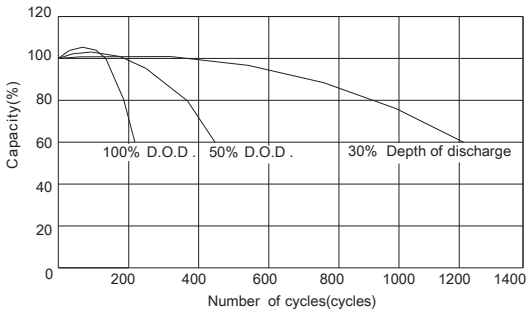
Temperature Effects in Relation to Battery Capacity



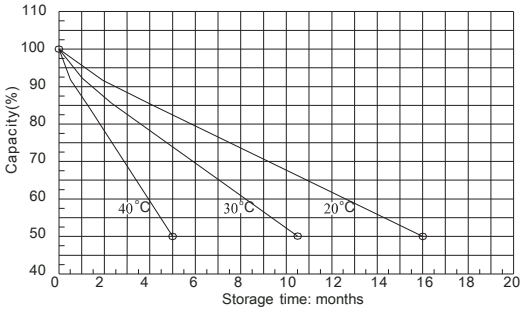
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 28-12i (12V 28AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.75 V/C)	28.0AH	
	10 hour rate (2.3A, 10.5V)	28Ah
	5 hour rate (4.25A, 10.5V)	21.25Ah
	1 hour rate (14.4A, 9.6V)	14.4Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤12 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	165 / 6.50
	Width (mm / inch)	125 / 4.92
	Height (mm / inch	175 / 6.89
	Total Height (mm / inch)	182 / 7.17
Approx. Weight (Kg / lbs)	8.5 / 18.7	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~60°C Charge : -10~60°C Storage : -20~60°C	
Max. Discharge Current 68°F(20°C)	300A(5s)	
Short Circuit Current	1200A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.30-2.35VPC
	Maximum charging current	9.6A
	Temperature compensation	-30mV/°C
	Standby use	2.23-2.27VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

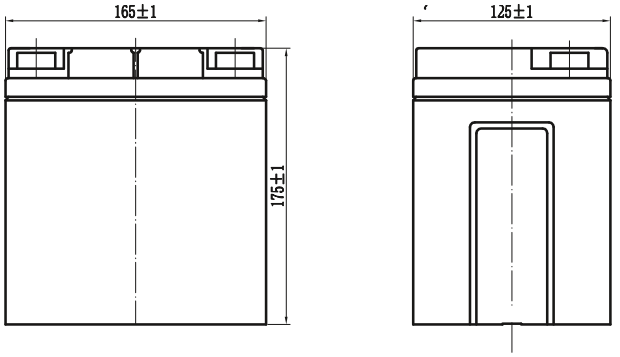
End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	87.0	60.8	44.7	26.0	14.4	6.63	4.60	2.44	1.24
1.65V	82.5	57.9	42.7	25.0	13.9	6.42	4.50	2.40	1.23
1.70V	77.8	54.9	40.7	23.9	13.3	6.20	4.38	2.35	1.22
1.75V	73.0	51.8	38.6	22.7	12.7	5.95	4.25	2.30	1.20
1.80V	68.1	48.7	36.4	21.5	12.1	5.69	4.10	2.24	1.18

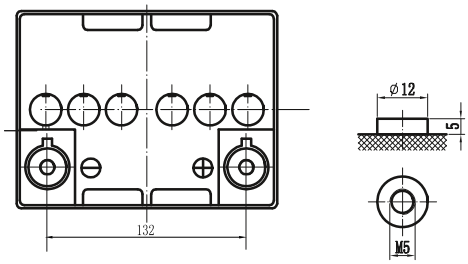
Discharge Constant Current (Watts at 68°F20°C)

End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	172	112	83.7	51.2	37.2	29.5	18.8	12.9	8.17
1.65V	161	106	79.2	48.6	35.5	28.2	18.2	12.6	8.03
1.70V	150	99.3	74.6	46.0	33.7	26.9	17.6	12.3	7.87
1.75V	140	92.7	70.0	43.3	31.9	25.6	16.9	11.9	7.70
1.80V	130	86.2	65.3	40.6	30.0	24.2	16.2	11.5	7.51

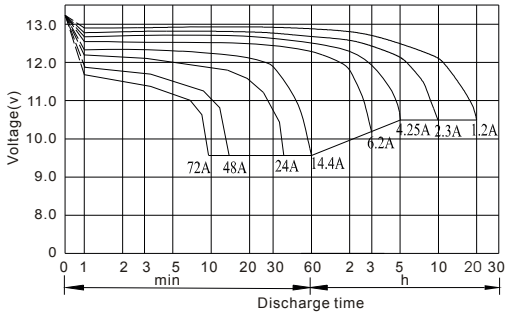
Updated: 19.02.2019

Dimensions

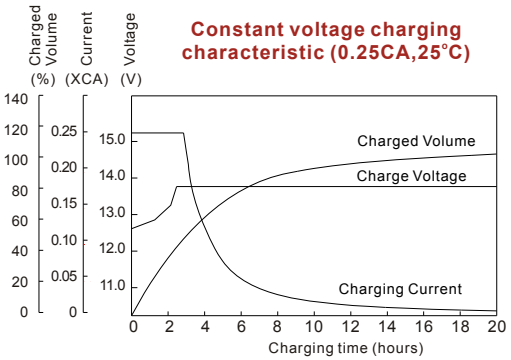




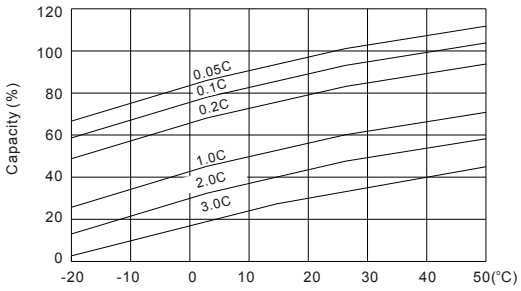
Discharge Characteristics



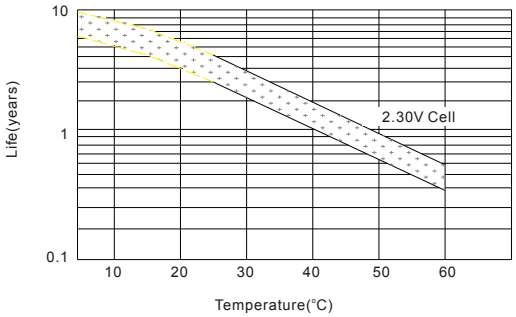
Float Charging Characteristics



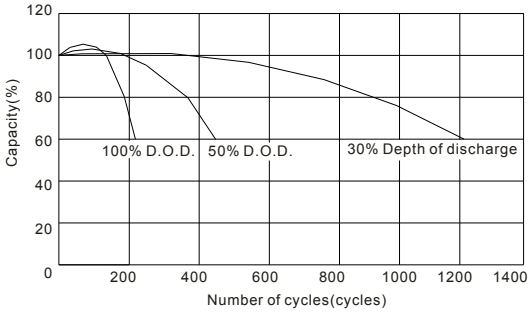
Temperature Effects in Relation to Battery Capacity



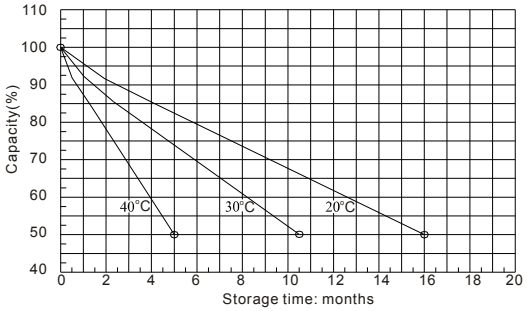
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 33-12i (12V 33AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	10 hour rate (3.30A, 10.8V)	33.0Ah
	5 hour rate (5.58A, 10.5V)	27.9Ah
	1 hour rate (22.3A, 9.6V)	22.3Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤19 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	195 / 7.68
	Width (mm / inch)	130 / 5.12
	Height (mm / inch	155 / 6.10
	Total Height (mm / inch)	168 / 6.61
Approx. Weight (Kg / lbs)	9.7 / 21.4	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	330A(5s)	
Short Circuit Current	850A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.4-2.45VPC
	Maximum charging current	9.9A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.28VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

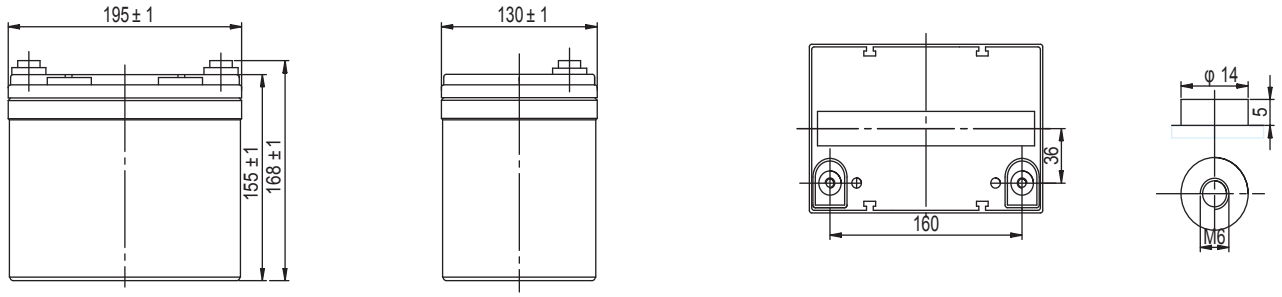
End Point Volts/Cell	10min	15min	30min	1h	3h	5h	10h	20h	
1.60V	69.3	57.1	32.6	22.3	9.08	6.30	3.36	1.81	
1.65V	65.0	54.1	31.3	21.9	8.97	6.25	3.35	1.79	
1.70V	60.0	51.4	30.4	21.2	8.45	6.15	3.32	1.78	
1.75V	56.1	47.8	29.4	20.3	8.25	5.58	3.31	1.76	
1.80V	51.4	44.8	28.8	19.8	8.18	5.50	3.30	1.75	

Discharge Constant Current (Watts at 68°F20°C)

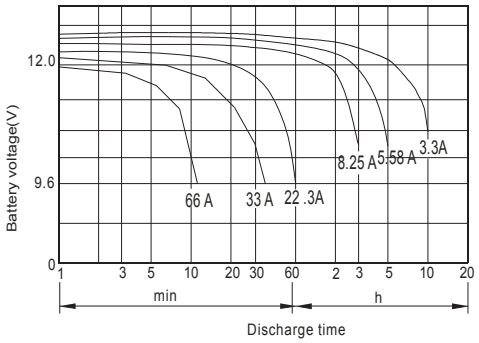
End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	
1.60V	122	100	65.3	45.5	40.9	23.3	17.4	12.2	
1.65V	116	98.6	61.7	44.2	40.5	23.1	17.3	11.9	
1.70V	110	95.7	60.0	43.5	39.9	22.6	16.8	11.5	
1.75V	104	92.0	58.0	42.5	39.1	21.8	16.0	11.3	
1.80V	97.7	89.0	56.0	41.5	38.3	21.0	15.2	11.0	

Updated: 07.01.2019

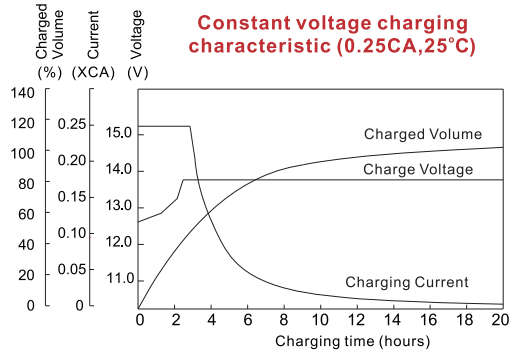
Dimensions



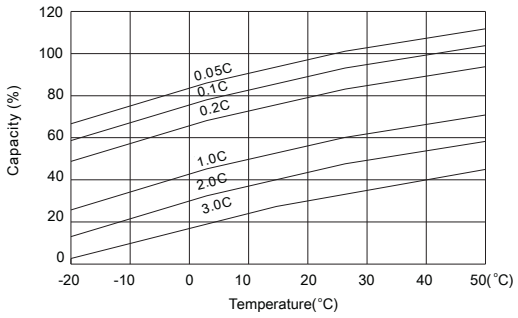
Discharge Characteristics



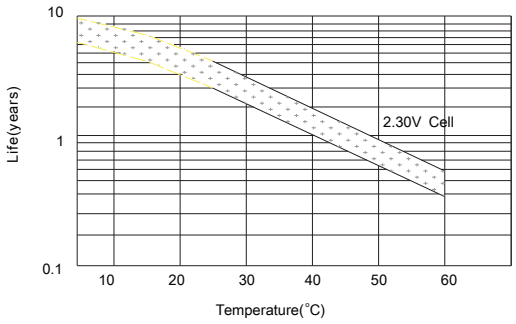
Float Charging Characteristics



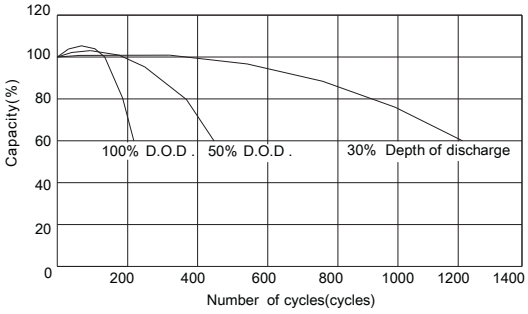
Temperature Effects in Relation to Battery Capacity



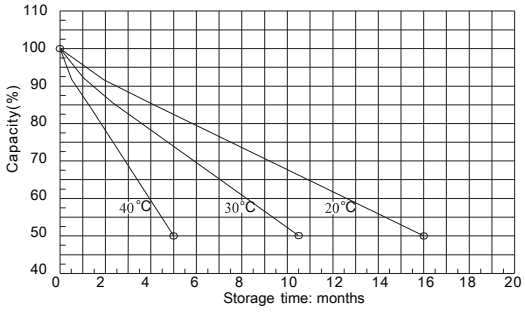
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 40-12i (12V 40AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	40.0AH	
	10 hour rate (4.0A, 10.8V)	40.0Ah
	5 hour rate (6.83A, 10.5V)	34.15Ah
	1 hour rate (24.9A, 9.6V)	24.9Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤19 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	197.5 / 7.78
	Width (mm / inch)	165.5 / 6.52
	Height (mm / inch	170 / 6.69
	Total Height (mm / inch)	170 / 6.69
Approx. Weight (Kg / lbs)	13.8 / 30.4	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	400A(5s)	
Short Circuit Current	900A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	12.0A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.28VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

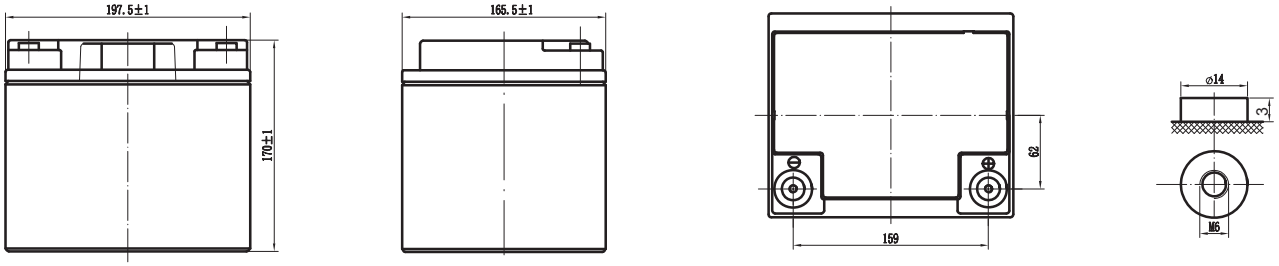
End Point Volts/Cell	10min	15min	30min	1h	3h	5h	10h	20h	
1.60V	86.5	70.7	39.9	24.9	10.3	7.22	4.20	2.22	
1.65V	82.2	67.1	38.7	24.6	10.1	7.10	4.15	2.20	
1.70V	77.8	64.5	37.3	24.2	9.89	6.97	4.10	2.18	
1.75V	73.6	61.0	36.1	23.9	9.65	6.83	4.05	2.15	
1.80V	69.9	55.2	35.8	23.5	9.43	6.66	4.00	2.11	

Discharge Constant Current (Watts at 68°F20°C)

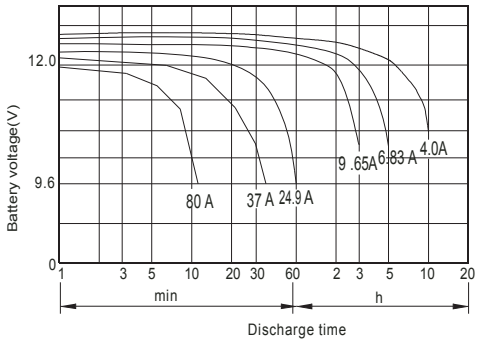
End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	
1.60V	158	124	81.2	60.2	49.9	27.5	21.0	14.0	
1.65V	152	120	78.8	59.0	49.2	27.1	20.7	13.8	
1.70V	144	117	76.3	57.8	48.3	26.6	20.3	13.6	
1.75V	138	113	73.8	56.6	47.5	26.2	20.0	13.4	
1.80V	130	109	71.3	55.4	46.7	25.8	19.6	13.3	

Updated: 07.01.2019

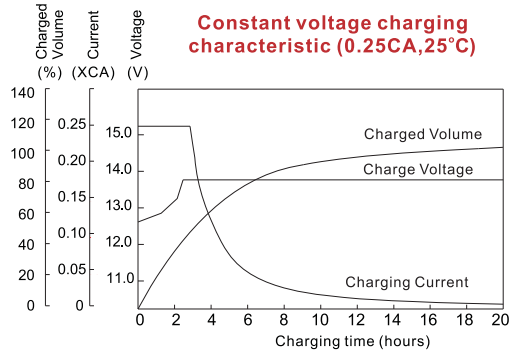
Dimensions



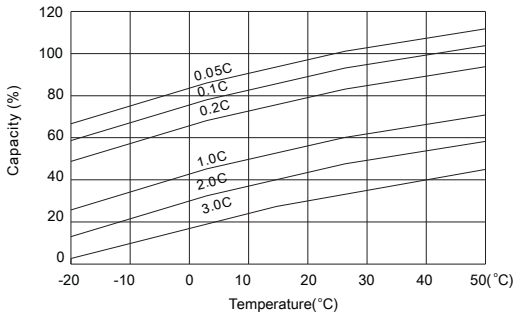
Discharge Characteristics



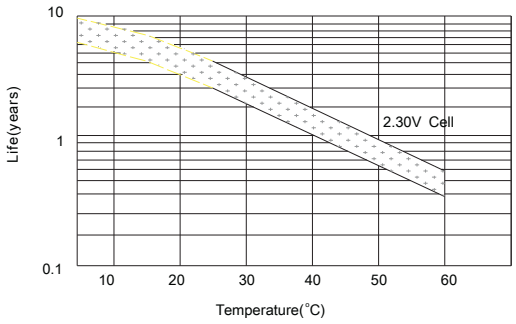
Float Charging Characteristics



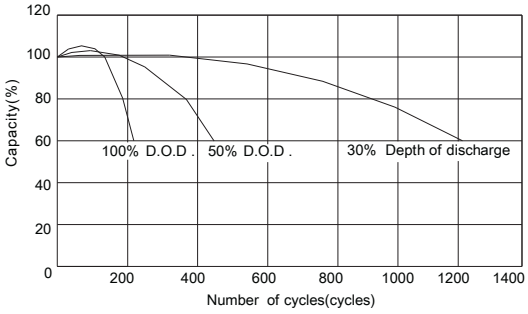
Temperature Effects in Relation to Battery Capacity



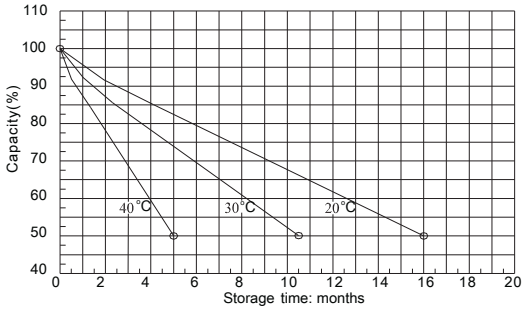
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 55-12i (12V 55AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	10 hour rate (5.5A, 10.8V)	55.0Ah
	5 hour rate (9.23A, 10.5V)	46.15Ah
	1 hour rate (35.1A, 9.6V)	35.1Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤7.2 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	229 / 9.01
	Width (mm / inch)	138 / 5.43
	Height (mm / inch	208 / 8.18
	Total Height (mm / inch)	213 / 8.38
Approx. Weight (Kg / lbs)	18.0 / 39.7	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	550A(5s)	
Short Circuit Current	1400A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	16.5A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.30VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

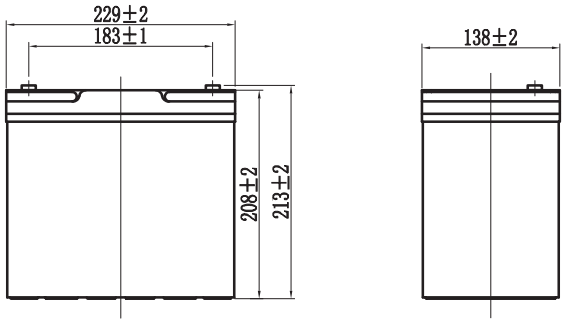
End Point Volts/Cell	10min	15min	30min	1h	3h	5h	10h	20h	
1.60V	137	103	61.9	36.9	15.2	10.1	5.76	2.98	
1.65V	131	99.2	60.0	35.9	14.8	9.81	5.71	2.97	
1.70V	125	94.2	58.1	35.0	14.5	9.64	5.66	2.96	
1.75V	118	89.2	56.2	34.1	14.1	9.46	5.61	2.94	
1.80V	109	82.7	54.2	33.3	13.8	9.29	5.50	2.91	

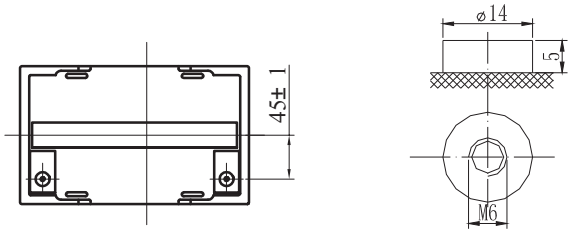
Discharge Constant Current (Watts at 68°F20°C)

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	
1.60V	262	196	117	88.7	72.3	42.9	30.3	19.5	
1.65V	251	188	115	87.3	70.7	42.0	29.6	19.2	
1.70V	239	179	113	85.6	69.1	41.2	29.0	18.7	
1.75V	229	172	111	83.4	67.5	40.1	28.4	18.5	
1.80V	218	163	110	81.5	65.7	39.1	27.4	18.4	

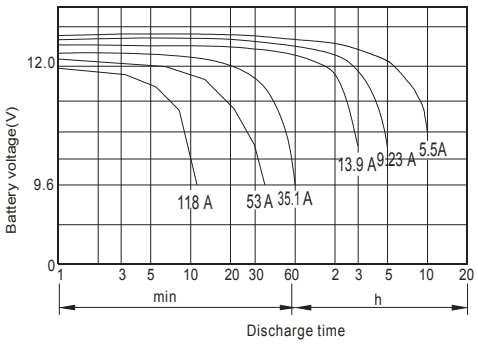
Updated: 07.01.2019

Dimensions

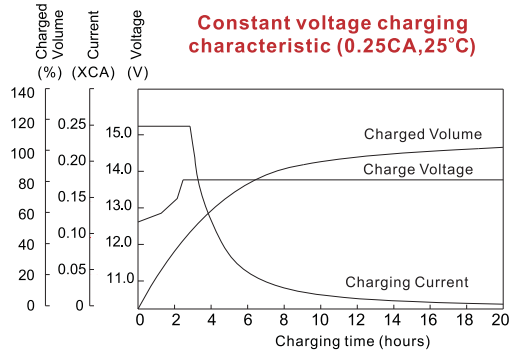




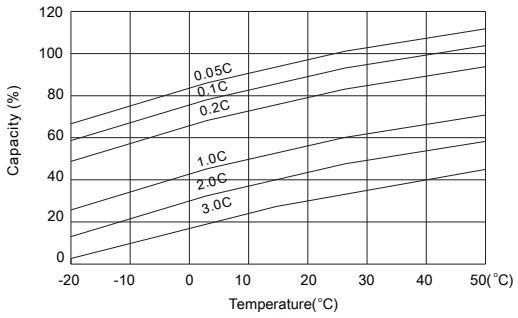
Discharge Characteristics



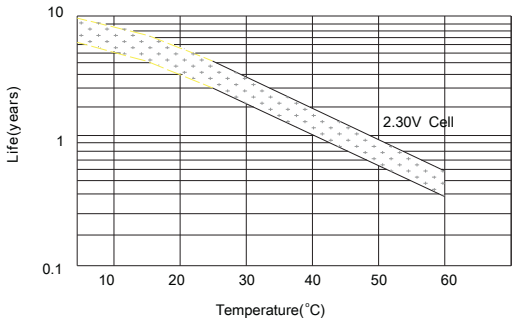
Float Charging Characteristics



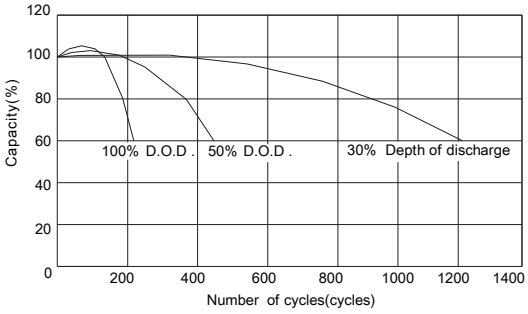
Temperature Effects in Relation to Battery Capacity



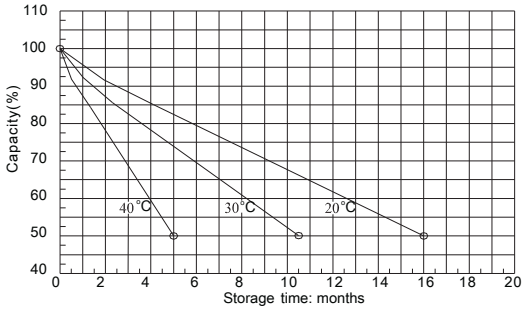
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 60-12i (sh) (12V 60AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	20 hour rate (3.1A, 10.8V)	62.0Ah
	10 hour rate (6.0A, 10.8V)	60.0Ah
	5 hour rate (10.5A, 10.5V)	52.5Ah
	1 hour rate (40.3A, 9.6V)	40.3Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤7.0 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	258 /10.16
	Width (mm / inch)	166 / 6.54
	Height (mm / inch	206 / 8.11
	Total Height (mm / inch)	215 / 8.46
Approx. Weight (Kg / lbs)	20.7 / 45.6	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	600A(5s)	
Short Circuit Current	1450A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	18.0A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.28VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Discharge Constant Current (Amperes at 68°F20°C)

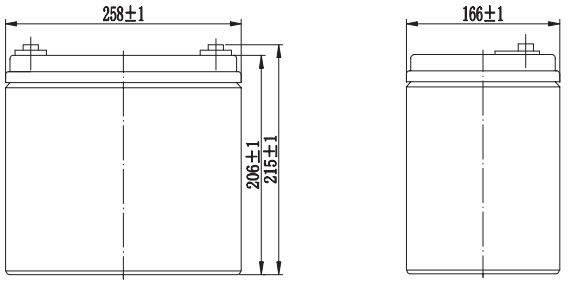
End Point Volts/Cell	10min	15min	30min	1h	3h	5h	10h	20h	
1.60V	137	108	63.7	40.3	16.2	11.2	6.40	3.30	
1.65V	132	103	61.8	39.3	15.8	10.9	6.30	3.25	
1.70V	122	98.2	59.9	38.3	15.4	10.7	6.20	3.20	
1.75V	113	92.9	57.9	37.3	15.0	10.5	6.10	3.15	
1.80V	103	86.0	55.8	36.5	14.7	10.3	6.00	3.10	

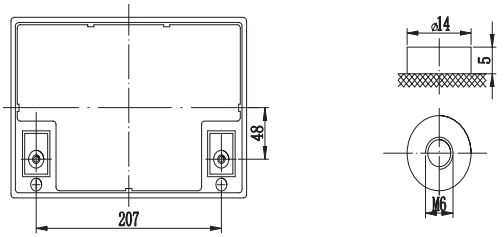
Discharge Constant Current (Watts at 68°F20°C)

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	
1.60V	243	187	113	91.3	75.7	45.9	33.0	22.1	
1.65V	237	183	112	89.8	73.9	44.9	32.3	21.9	
1.70V	223	180	110	88.0	72.2	43.9	31.6	21.5	
1.75V	210	177	108	86.0	70.6	42.9	30.9	21.3	
1.80V	196	168	106	83.8	68.7	41.7	30.2	21.1	

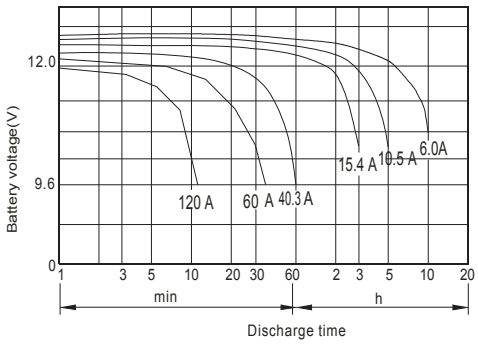
Updated: 07.01.2019

Dimensions

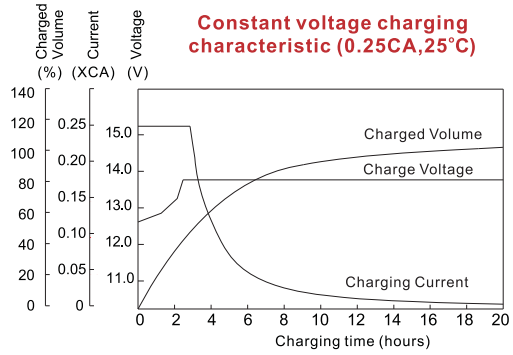




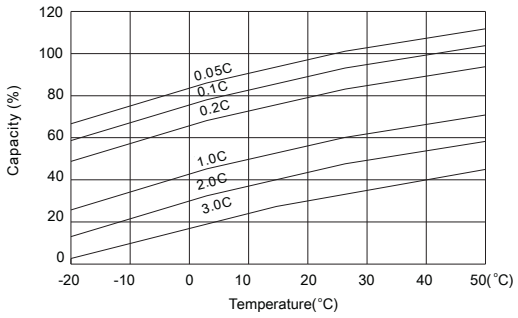
Discharge Characteristics



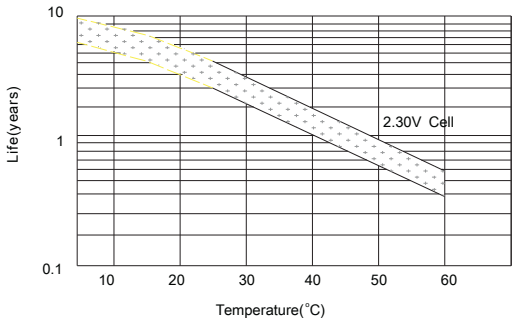
Float Charging Characteristics



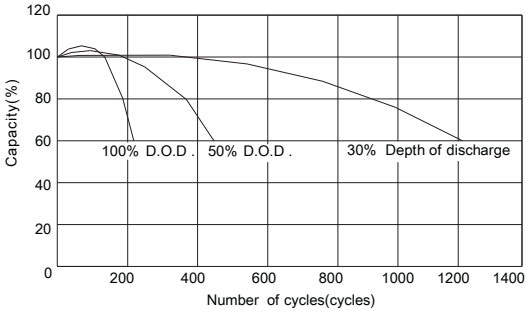
Temperature Effects in Relation to Battery Capacity



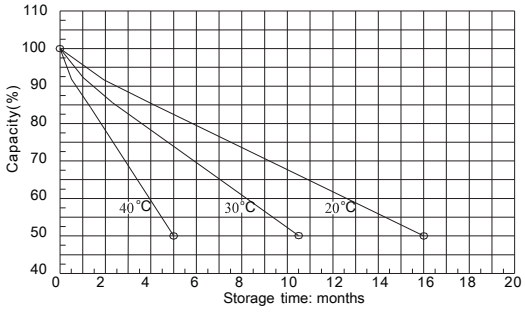
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 65-12i (12V 65AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	10 hour rate (6.5A, 10.8V)	65.0Ah
	5 hour rate (11A, 10.5V)	55.0Ah
	1 hour rate (45.1A, 9.6V)	45.1Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤6.8 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	350 / 13.8
	Width (mm / inch)	167 / 6.57
	Height (mm / inch	179 / 7.05
	Total Height (mm / inch)	179 / 7.05
Approx. Weight (Kg / lbs)	20.4 / 45.0	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	650A(5s)	
Short Circuit Current	1700A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	18.0A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.28VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Discharge Constant Current (Amperes at 68°F20°C)

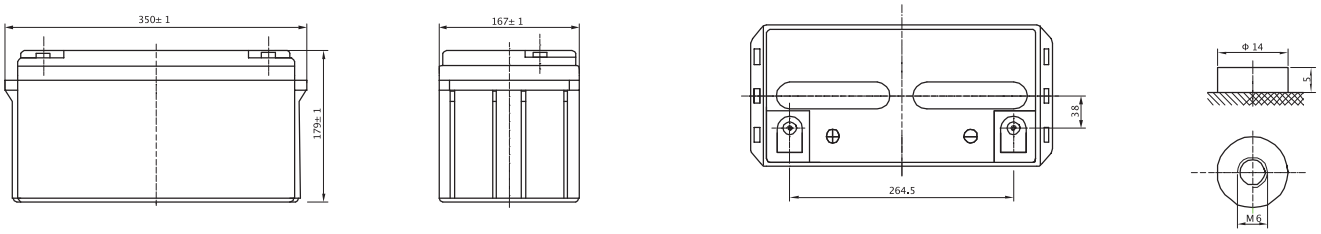
End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	212	151	126	75.4	45.1	18.4	11.8	6.70	3.48
1.65V	201	144	121	73.3	44.0	18.0	11.6	6.58	3.46
1.70V	189	137	115	71.3	43.0	17.6	11.3	6.56	3.44
1.75V	177	129	109	69.2	41.9	17.2	11.0	6.53	3.42
1.80V	164	120	102	66.9	41.0	16.9	10.7	6.50	3.40

Discharge Constant Current (Watts at 68°F20°C)

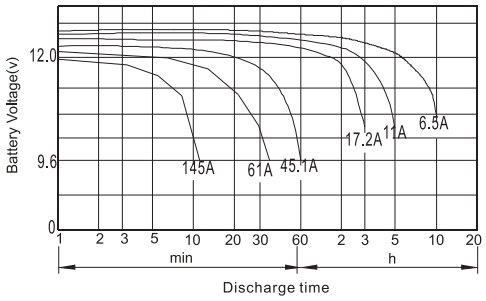
End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	378	275	207	129	99.1	81.8	47.5	33.8	22.5
1.65V	356	261	203	128	97.6	80.0	46.6	33.2	22.3
1.70V	335	246	200	127	95.7	78.3	45.6	32.5	22.0
1.75V	314	231	196	124	93.6	76.5	44.5	31.8	21.7
1.80V	302	215	187	122	91.3	75.7	43.3	31.1	21.4

Updated: 13.02.2019

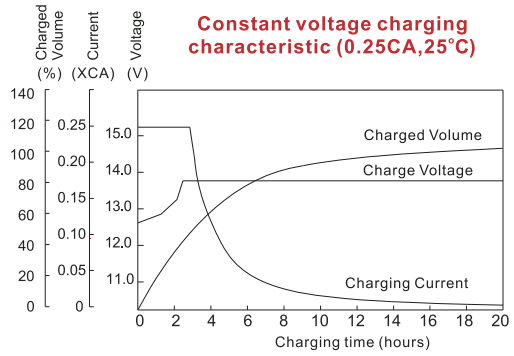
Dimensions



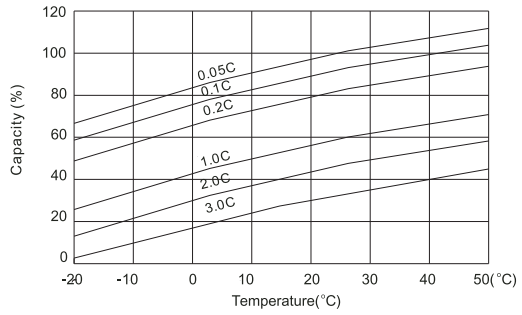
Discharge Characteristics



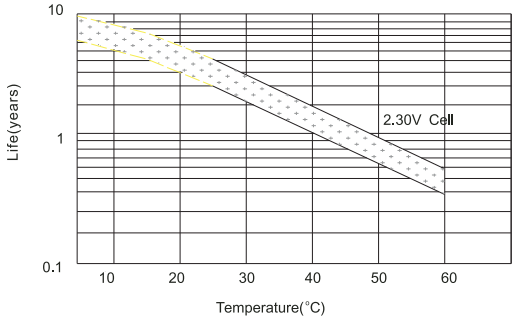
Float Charging Characteristics



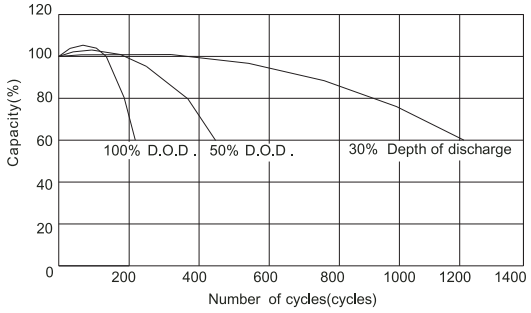
Temperature Effects in Relation to Battery Capacity



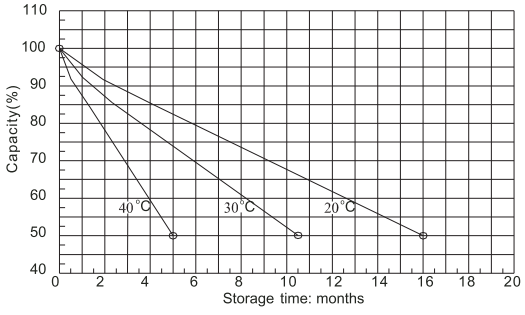
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



SSB SBL 75-12i (sh) (12V 75AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	10 hour rate (7.50A, 10.8V)	75.0Ah
	5 hour rate (13.6A, 10.5V)	68.0Ah
	1 hour rate (51.2A, 9.6V)	51.2Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤6.6 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	258 / 10.16
	Width (mm / inch)	166 / 6.54
	Height (mm / inch	210 / 8.27
	Total Height (mm / inch)	215 / 8.46
Approx. Weight (Kg / lbs)	24.0 / 52.9	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	700A(5s)	
Short Circuit Current	1800A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	22.5A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.30VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

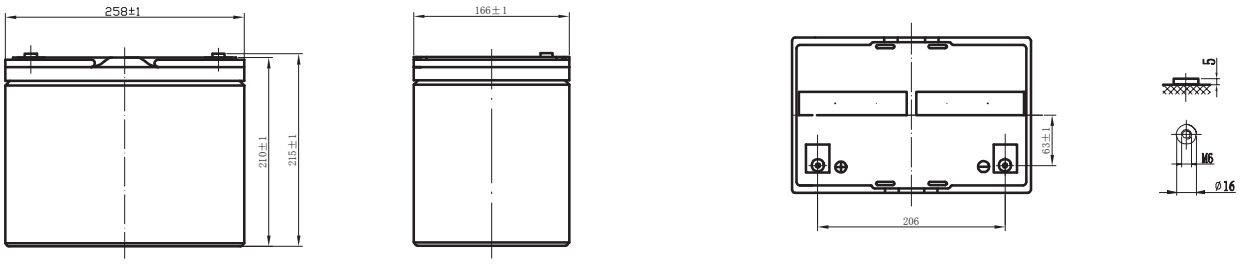
End Point Volts/Cell	10min	15min	30min	1h	3h	5h	10h	20h	
1.60V	182	140	83.4	51.2	22.1	14.4	7.67	4.05	
1.65V	172	134	73.9	48.5	21.7	14.2	7.65	4.02	
1.70V	161	124	78.5	47.8	46.2	14.0	7.60	3.98	
1.75V	154	119	75.1	46.2	20.9	13.6	7.55	3.96	
1.80V	142	114	74.6	44.3	20.1	13.4	7.50	3.94	

Discharge Constant Current (Watts at 68°F20°C)

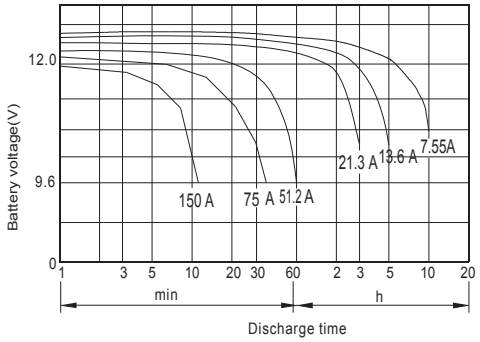
End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	
1.60V	320	251	161	122	97.6	54.7	41.0	27.3	
1.65V	306	246	156	120	95.5	53.5	40.0	27.1	
1.70V	296	242	148	113	91.6	51.3	39.7	26.5	
1.75V	279	227	145	113	88.2	49.4	39.1	26.5	
1.80V	266	216	144	108	85.9	48.1	38.8	26.3	

Updated: 07.01.2019

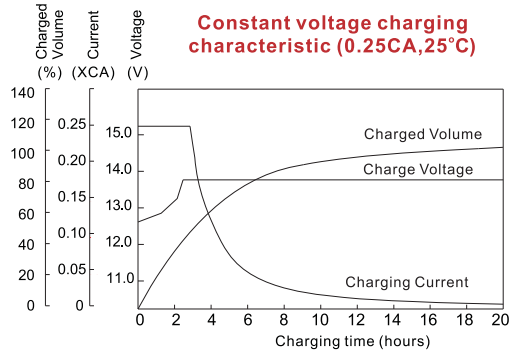
Dimensions



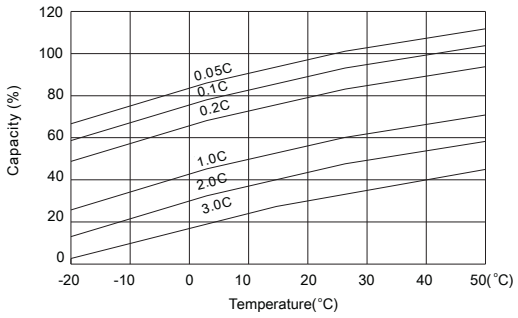
Discharge Characteristics



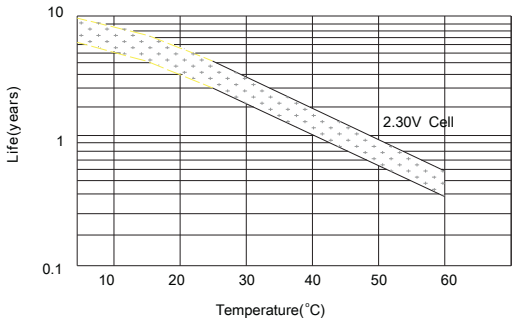
Float Charging Characteristics



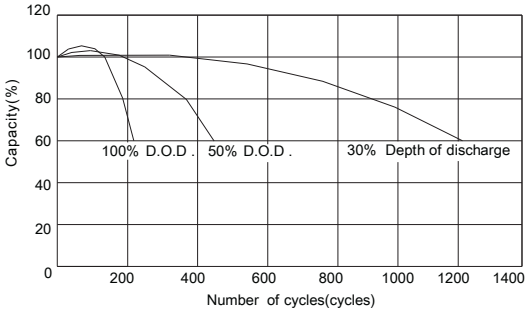
Temperature Effects in Relation to Battery Capacity



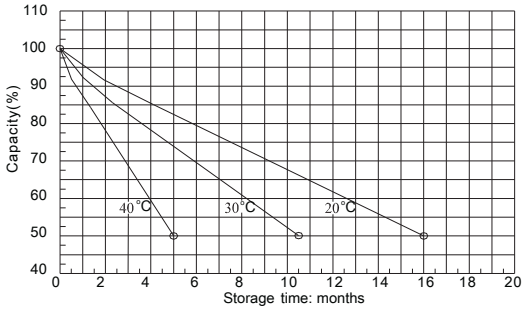
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 80-12i (12V 80AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	10 hour rate (8.0A, 10.8V)	80.0Ah
	5 hour rate (14.4A, 10.5V)	72.0Ah
	1 hour rate (53.7A, 9.6V)	53.7Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤6.5 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	350 / 13.8
	Width (mm / inch)	167 / 6.57
	Height (mm / inch	179 / 7.05
	Total Height (mm / inch)	179 / 7.05
Approx. Weight (Kg / lbs)	22.5 / 49.6	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	750A(5s)	
Short Circuit Current	1900A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	24.0A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.30VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Discharge Constant Current (Amperes at 68°F20°C)

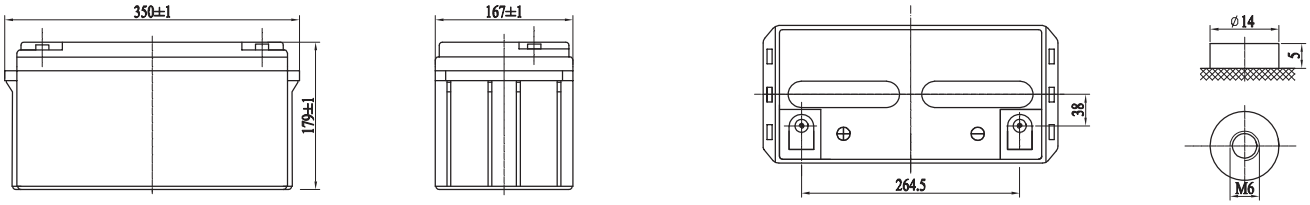
End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	
1.60V	-	149	87.3	66.2	53.7	22.7	15.0	8.20	
1.65V	-	137	83.0	62.2	51.6	22.5	14.7	8.15	
1.70V	-	132	80.3	61.0	49.8	22.4	14.7	8.10	
1.75V	-	126	77.6	57.3	47.1	21.8	14.4	8.05	
1.80V	-	118	75.0	55.9	46.3	20.7	14.1	8.00	

Discharge Constant Current (Watts at 68°F20°C)

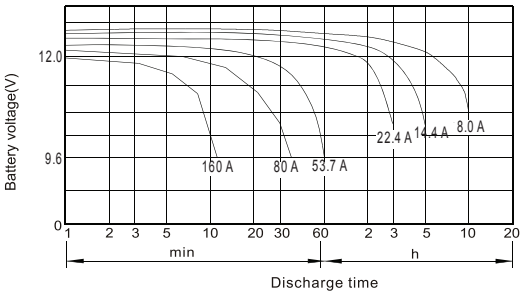
End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	
1.60V	-	258	165	124	98.6	56.5	42.5	27.9	
1.65V	-	250	157	122	97.8	55.3	41.1	27.4	
1.70V	-	246	151	117	93.8	53.7	40.4	27.0	
1.75V	-	232	149	114	92.3	53.0	39.9	26.8	
1.80V	-	218	146	111	88.5	51.4	39.0	26.4	

Updated: 13.02.2019

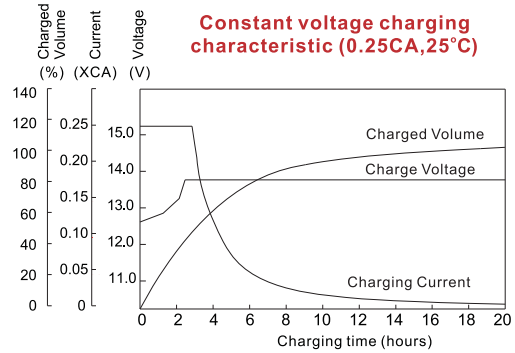
Dimensions



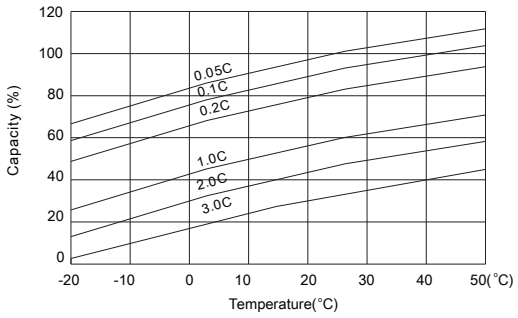
Discharge Characteristics



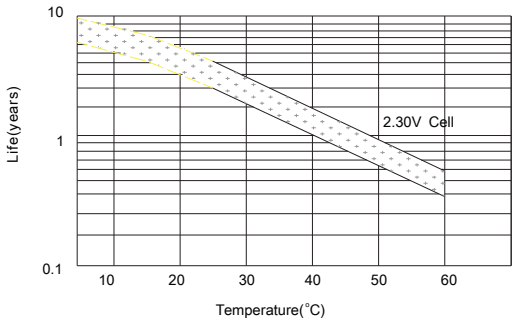
Float Charging Characteristics



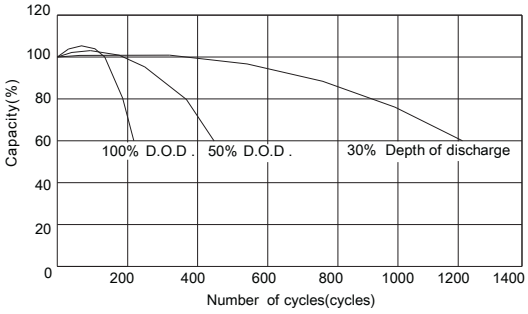
Temperature Effects in Relation to Battery Capacity



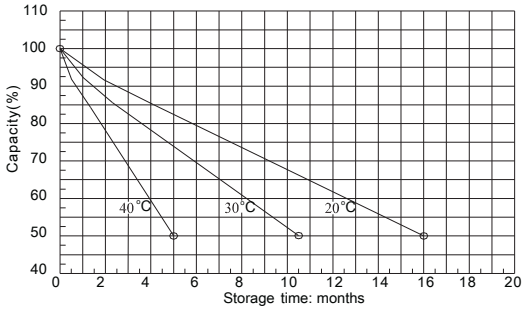
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 100-12i (sh) (12V 100AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	10 hour rate (10.0A, 10.8V)	100.0Ah
	5 hour rate (16.6A, 10.5V)	83.0Ah
	1 hour rate (61.0A, 9.6V)	61.0Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤5.7 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	330 / 12.99
	Width (mm / inch)	171 / 6.73
	Height (mm / inch	215 / 8.46
	Total Height (mm / inch)	222 / 8.74
Approx. Weight (Kg / lbs)	29 / 63.9	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	750A(5s)	
Short Circuit Current	1900A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	30.0A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.28VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
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Discharge Constant Current (Amperes at 68°F20°C)

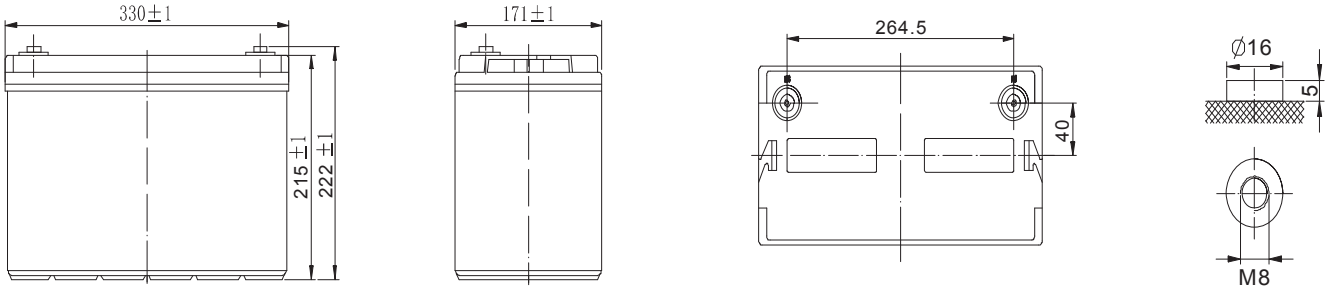
End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V	-	-	98.9	-	61.0	25.1	17.6	10.8	5.50
1.65V	-	-	95.0	-	60.6	24.6	17.3	10.6	5.45
1.70V	-	-	92.2	-	59.7	24.1	17.0	10.4	5.40
1.75V	-	-	89.3	-	58.9	23.5	16.6	10.2	5.35
1.80V	-	-	87.4	-	57.1	22.8	16.3	10.0	5.30

Discharge Constant Current (Watts at 68°F20°C)

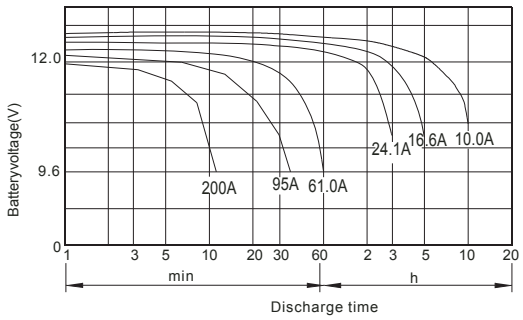
End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	
1.60V	-	-	186	138	119	68.2	48.4	33.8	
1.65V	-	-	180	134	117	67.0	47.8	33.6	
1.70V	-	-	176	132	116	65.8	47.3	33.3	
1.75V	-	-	170	129	112	64.6	46.7	33.2	
1.80V	-	-	164	126	109	63.9	45.9	32.9	

Updated: 13.02.2019

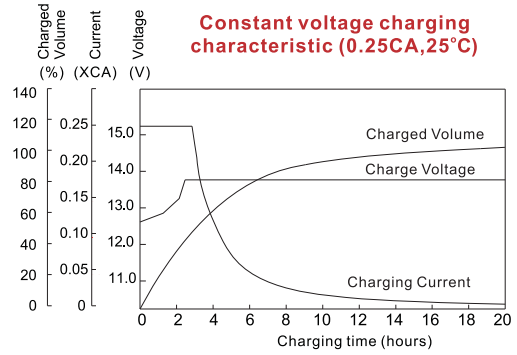
Dimensions



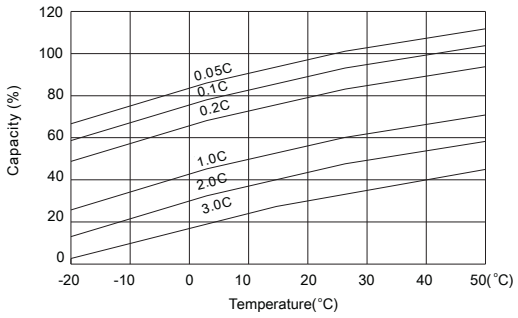
Discharge Characteristics



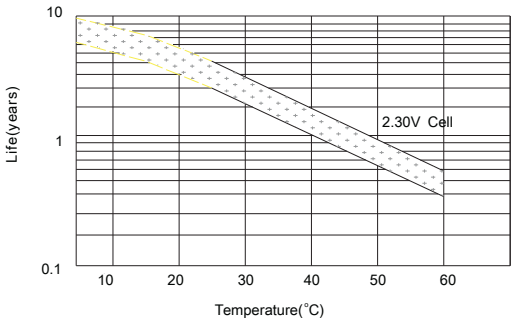
Float Charging Characteristics



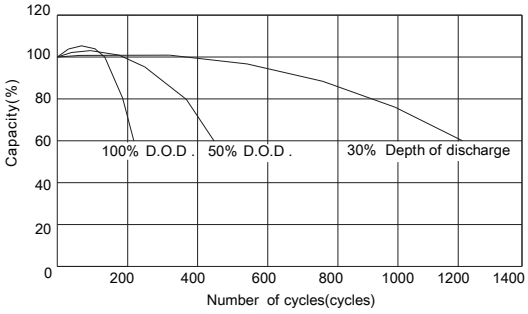
Temperature Effects in Relation to Battery Capacity



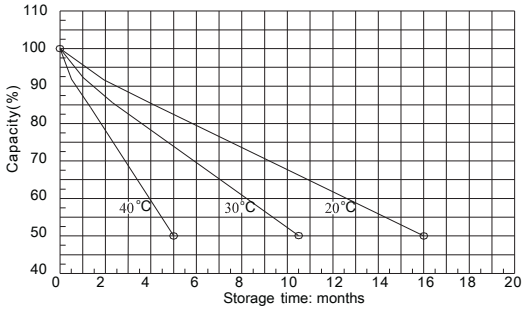
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 120-12i (sh) (12V 120AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	10 hour rate (12.0A, 10.8V)	120.0Ah
	5 hour rate (18.7A, 10.5V)	93.5Ah
	1 hour rate (71.6A, 9.6V)	71.6Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤5.3 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	330 / 12.99
	Width (mm / inch)	171 / 6.73
	Height (mm / inch	215 / 8.46
	Total Height (mm / inch)	222 / 8.74
Approx. Weight (Kg / lbs)	32.5 / 71.6	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	950A(5s)	
Short Circuit Current	2250A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	36.0A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.30VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
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Discharge Constant Current (Amperes at 68°F20°C)

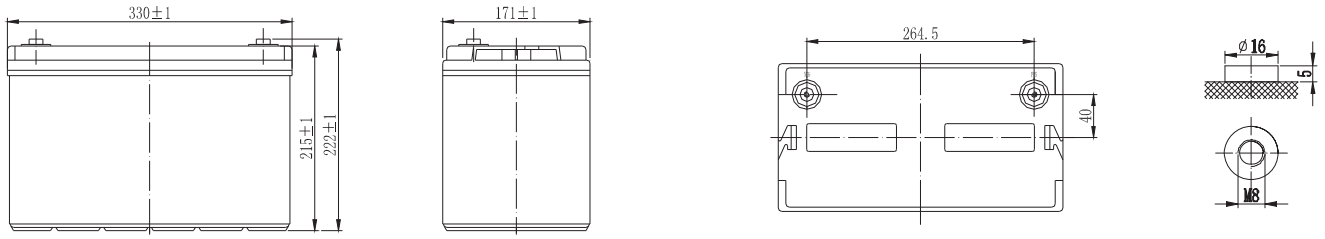
End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V	250	203	120	-	71.6	28.9	19.2	12.4	6.55
1.65V	237	195	116	-	71.1	28.3	19.0	12.3	6.50
1.70V	223	187	112	-	69.7	27.7	18.8	12.2	6.44
1.75V	210	179	108	-	67.5	27.1	18.7	12.1	6.38
1.80V	197	171	106	-	65.4	26.3	18.5	12.0	6.30

Discharge Constant Current (Watts at 68°F20°C)

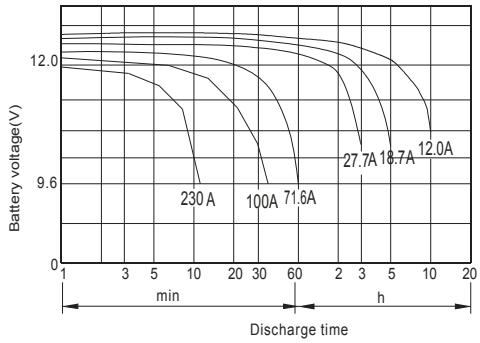
End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	
1.60V	449	370	227	157	145	77.8	56.1	38.1	
1.65V	426	358	220	153	143	76.4	55.4	37.9	
1.70V	404	346	213	150	141	75.0	54.8	37.6	
1.75V	383	334	206	146	137	73.6	54.1	37.4	
1.80V	358	322	199	143	133	72.9	53.2	37.0	

Updated: 13.02.2019

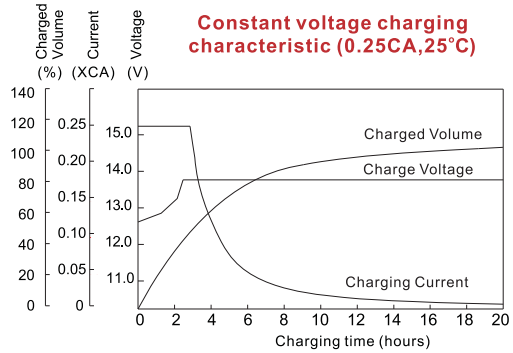
Dimensions



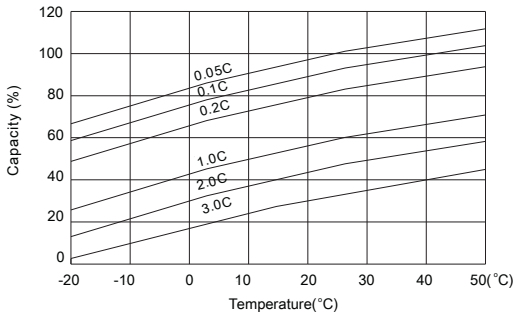
Discharge Characteristics



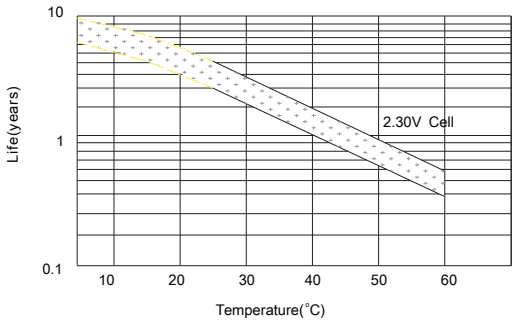
Float Charging Characteristics



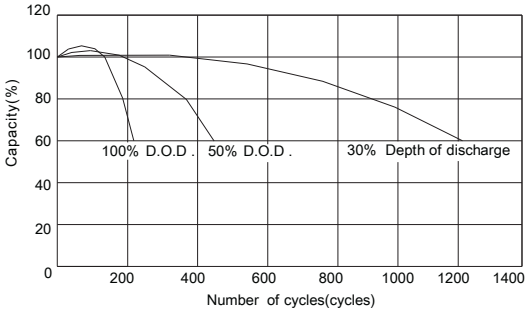
Temperature Effects in Relation to Battery Capacity



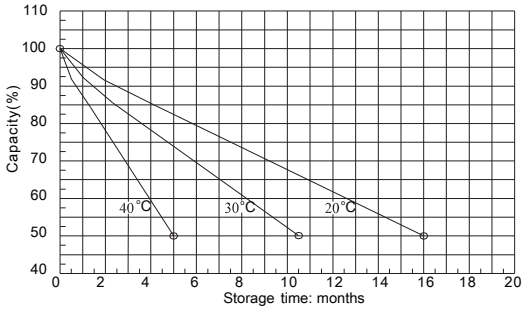
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 134R-12i (12V 134AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	10 hour rate (13.4A, 10.8V)	134.0Ah
	5 hour rate (23.6A, 10.5V)	118.0Ah
	1 hour rate (86.5A, 9.6V)	86.5Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤5.0 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	341 / 13.4
	Width (mm / inch)	173 / 6.81
	Height (mm / inch	283 / 11.1
	Total Height (mm / inch)	287 / 11.3
Approx. Weight (Kg / lbs)	40.0 / 88.2	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	950A(5s)	
Short Circuit Current	2500A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	40.2A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.30VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
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Discharge Constant Current (Amperes at 68°F20°C)

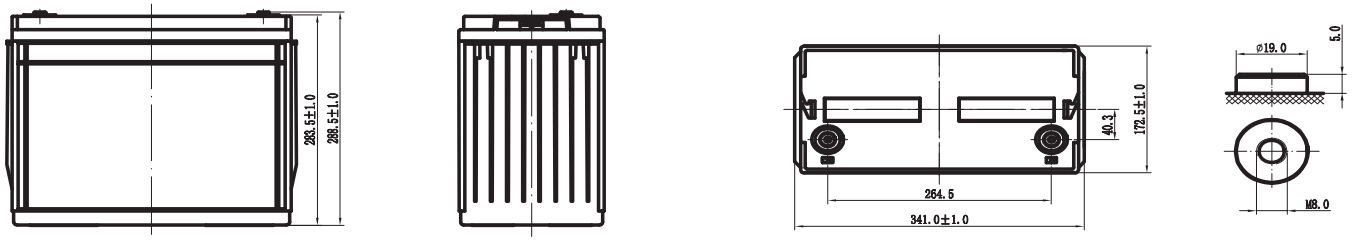
End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V	314	248	147	107	86.5	38.2	25.6	13.6	-
1.65V	292	237	145	105	84.3	37.4	25.0	13.6	-
1.70V	280	231	142	102	82.1	36.8	24.3	13.5	-
1.75V	257	214	139	99.8	80.2	36.1	23.6	13.5	-
1.80V	235	197	134	96.7	78.0	35.2	23.0	13.4	-

Discharge Constant Current (Watts at 68°F20°C)

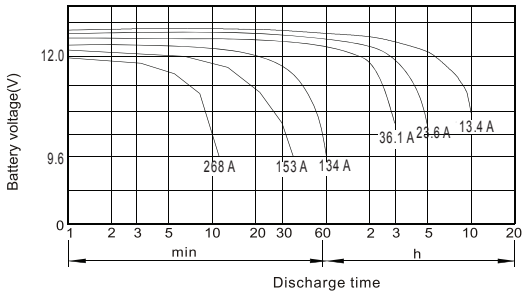
End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	10h
1.60V	566	474	287	206	163	94.6	71.8	47.4	-
1.65V	529	433	261	200	158	92.2	70.3	47.0	-
1.70V	512	427	258	195	154	90.6	69.5	45.9	-
1.75V	483	414	254	192	152	89.5	68.6	44.8	-
1.80V	448	391	247	189	150	88.7	68.2	44.0	-

Updated: 13.02.2019

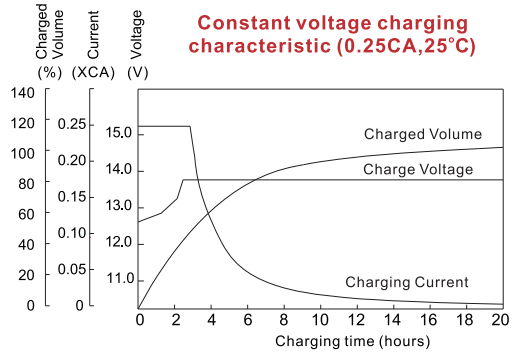
Dimensions



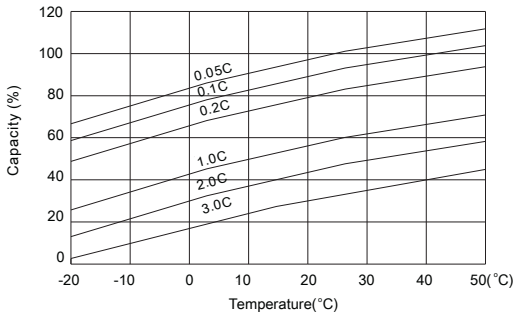
Discharge Characteristics



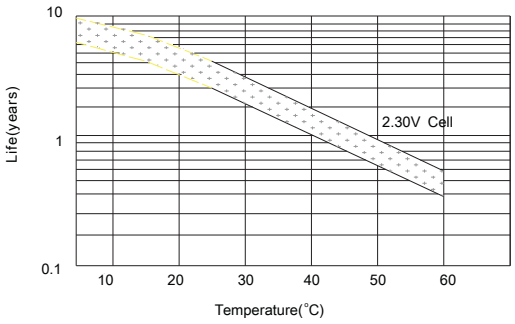
Float Charging Characteristics



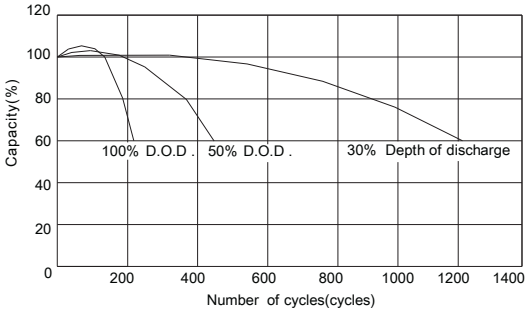
Temperature Effects in Relation to Battery Capacity



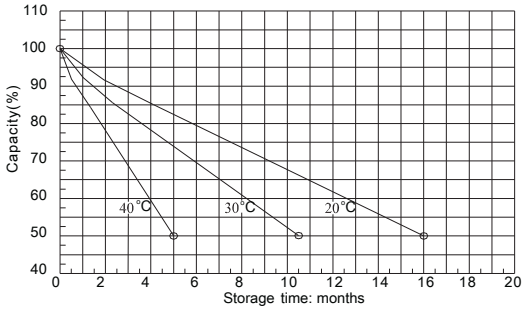
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 150-12i (12V 150AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	10 hour rate (15.0A, 10.8V)	150.0Ah
	5 hour rate (24.5A, 10.5V)	122.5Ah
	1 hour rate (103.0A, 9.6V)	103.0Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤3.5 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	482 / 19.0
	Width (mm / inch)	170 / 6.69
	Height (mm / inch	240 / 9.45
	Total Height (mm / inch)	240 / 9.45
Approx. Weight (Kg / lbs)	44.8 / 98.8	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	970A(5s)	
Short Circuit Current	2800A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	40.0A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.28VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

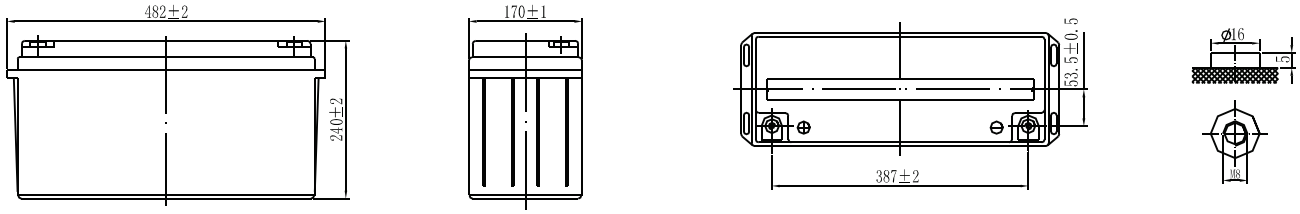
End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V	-	-	186	-	103	42.9	27.6	15.4	8.07
1.65V	-	-	177	-	98.7	41.1	26.4	15.3	8.03
1.70V	-	-	167	-	94.1	39.3	25.3	15.2	7.98
1.75V	-	-	158	-	89.2	37.4	24.5	15.1	7.93
1.80V	-	-	153	-	87.2	36.7	23.7	15.0	7.88

Discharge Constant Current (Watts at 68°F20°C)

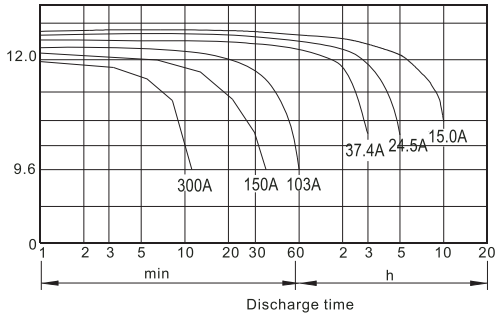
End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	10h
1.60V	-	-	329	241	186	109	79.2	53.7	-
1.65V	-	-	318	234	182	107	77.2	52.4	-
1.70V	-	-	308	227	178	104	75.2	51.0	-
1.75V	-	-	297	220	174	101	73.3	50.0	-
1.80V	-	-	286	212	170	97.6	71.3	48.8	-

Updated: 13.02.2019

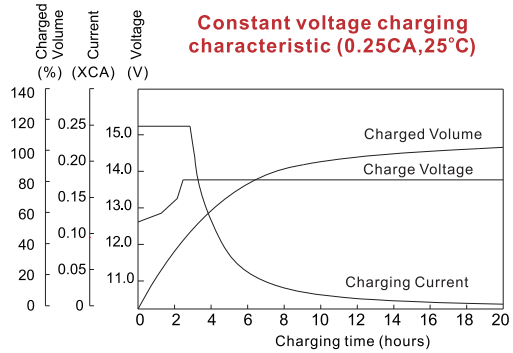
Dimensions



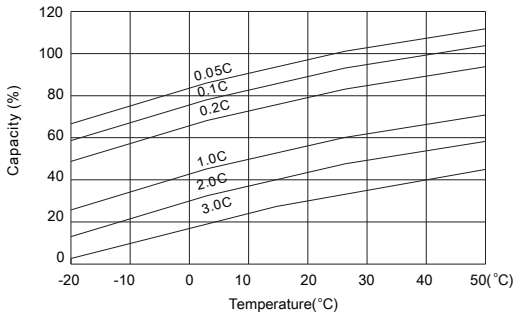
Discharge Characteristics



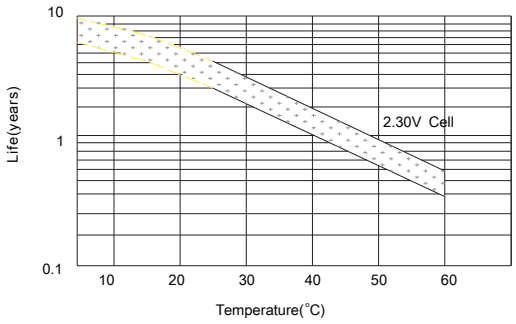
Float Charging Characteristics



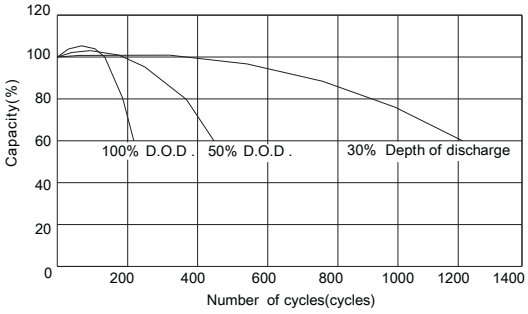
Temperature Effects in Relation to Battery Capacity



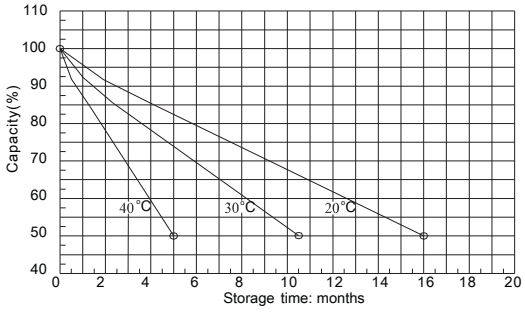
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 200-12i (12V 200AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	10 hour rate (20.0A, 10.8V)	200.0Ah
	5 hour rate (34.7A, 10.5V)	173.5Ah
	1 hour rate (129.0A, 9.6V)	129.0Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤4.0 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	522 / 20.55
	Width (mm / inch)	238 / 9.37
	Height (mm / inch	218 / 8.58
	Total Height (mm / inch)	223 / 8.78
Approx. Weight (Kg / lbs)	59.1 / 130	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	1000A(5s)	
Short Circuit Current	3300A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	60.0A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.28VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

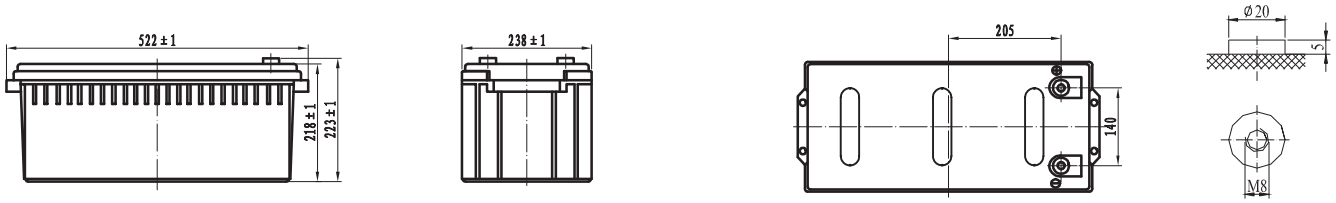
End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V	-	-	196	-	129	50.3	36.9	21.1	10.70
1.65V	-	-	188	-	126	49.1	36.2	20.9	10.65
1.70V	-	-	181	-	123	48.2	35.4	20.7	10.60
1.75V	-	-	175	-	120	47.1	34.7	20.4	10.55
1.80V	-	-	168	-	117	45.7	33.9	20.0	10.50

Discharge Constant Current (Watts at 68°F20°C)

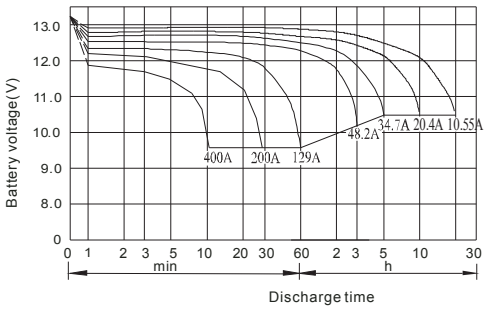
End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	10h
1.60V	-	-	374	268	248	137	97.4	70.3	-
1.65V	-	-	360	262	243	134	96.1	69.7	-
1.70V	-	-	347	257	238	131	94.8	69.1	-
1.75V	-	-	332	252	233	128	93.4	68.6	-
1.80V	-	-	319	247	228	124	92.4	68.1	-

Updated: 13.02.2019

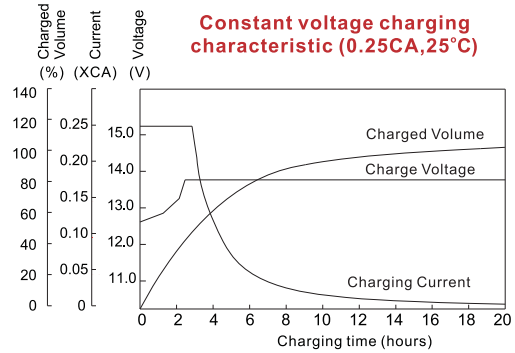
Dimensions



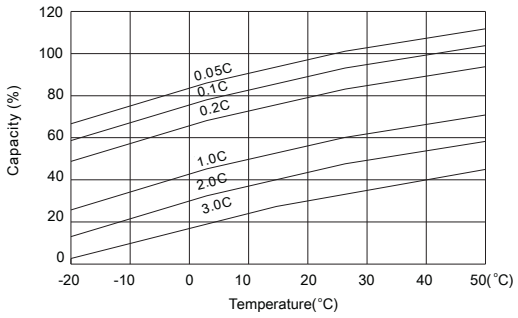
Discharge Characteristics



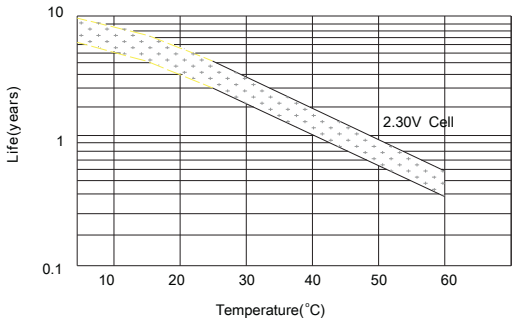
Float Charging Characteristics



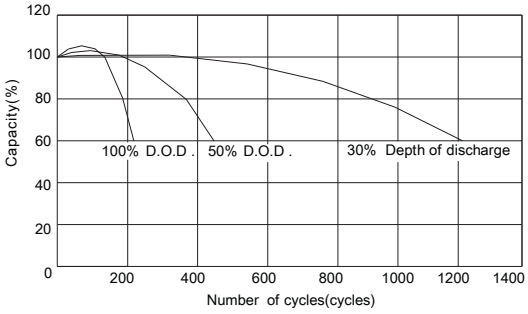
Temperature Effects in Relation to Battery Capacity



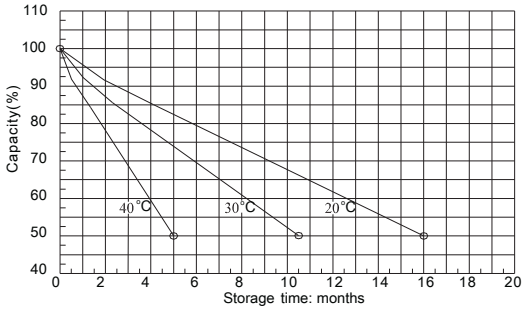
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

SSB SBL 260-12i (12V 260AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	260.0AH	
	C20 (13,5A / 1,8V)	274.0Ah
	C10 (26,6A / 1,75V)	260.0Ah
	C5 (46,5A / 1,75V)	232.5Ah
	C3 (71,1A / 1,6V)	201.9Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤3.5 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	520 / 20.5
	Width (mm / inch)	268 / 10.6
	Height (mm / inch	220 / 8.66
	Total Height (mm / inch)	225 / 8.86
Approx. Weight (Kg / lbs)	74.0 / 163.1	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	2600A(5s)	
Short Circuit Current	4810A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	78.0A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.30VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

*All specifications are approximate values

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

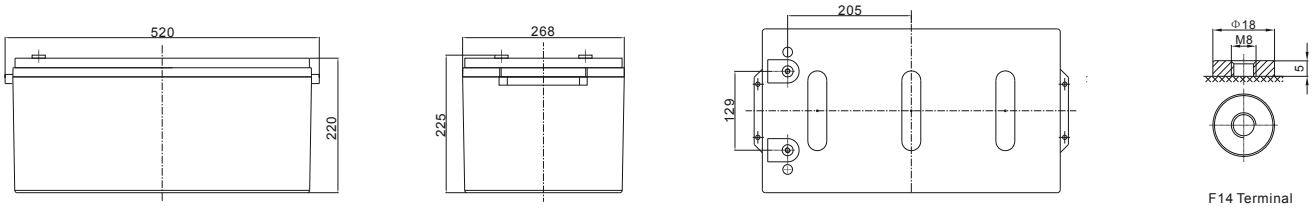
F.V/TIME	10min	15min	30min	60min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	-	440.4	272.8	-	160.1	95.9	71.1	57.8	48.8	32.6	27.7	14.2
1.65V	-	428.9	266.8	-	157.1	94.5	70.2	57.1	48.2	32.3	27.5	14.1
1.70V	-	413.7	258.9	-	153.2	92.6	68.9	56.1	47.5	31.8	27.1	13.9
1.75V	-	393.9	248.5	-	148.0	90.2	67.3	54.8	46.5	31.2	26.6	13.7
1.80V	-	368.5	235.1	-	141.3	86.9	65.1	53.2	45.1	30.5	26.0	13.5
1.85V	-	336.5	217.9	-	132.6	82.7	62.2	51.0	43.4	29.4	25.2	13.1

Discharge Constant Current (Watts at 68°F20°C)

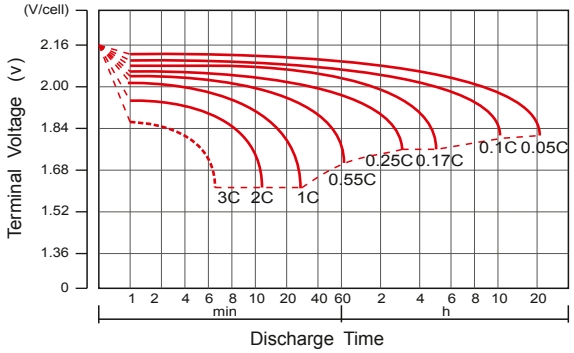
F.V/TIME	10min	15min	30min	60min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	-	781	503	-	304	184	138	113	95.4	64.6	55.3	28.4
1.65V	-	777	499	-	301	183	137	112	94.8	64.1	54.9	28.2
1.70V	-	756	487	-	295	180	135	110	93.5	63.4	54.2	28.0
1.75V	-	730	472	-	286	176	132	108	91.9	62.3	53.4	27.6
1.80V	-	693	451	-	275	171	128	105	89.6	60.9	52.2	27.1
1.85V	-	642	423	-	260	163	123	101	86.4	59.0	50.6	26.4

Updated: 07.05.2019

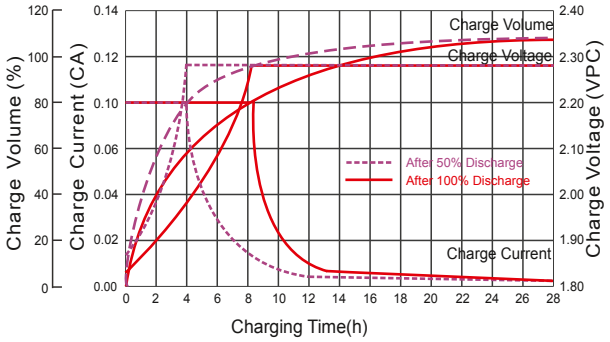
Dimensions



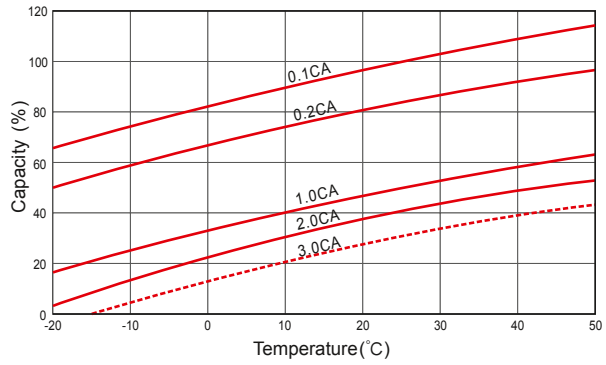
Discharge Characteristics



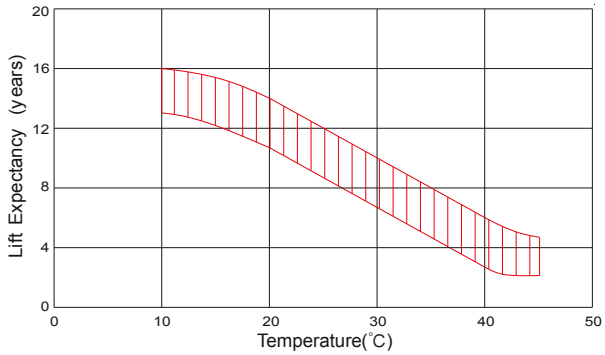
Float Charging Characteristics



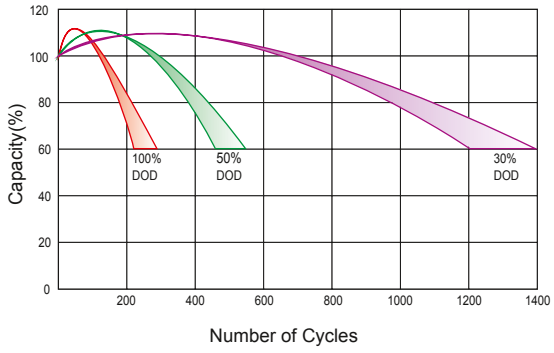
Temperature Effects in Relation to Battery Capacity



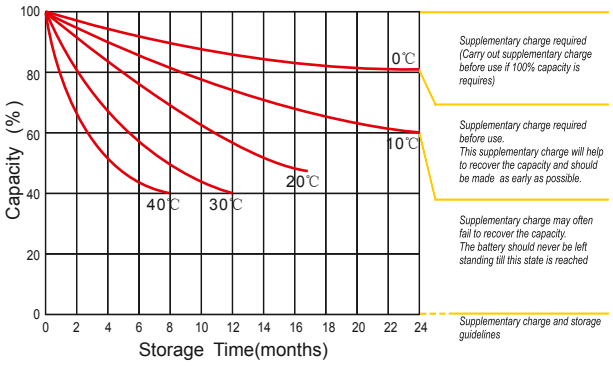
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



SSB SBL 260-12i (sh) (12V 260AH)

Specification

Nominal Voltage	12V	
Nominal Capacity (10hr / 20°C / 1.80 V/C)	10 hour rate (26.0A, 10.8V)	260.0Ah
	5 hour rate (43.5A, 10.5V)	217.5Ah
	3 hour rate (66.3A, 10.5V)	198.9Ah
	1 hour rate (160.0A, 9.6V)	160.0Ah
Internal Resistance	Fully Charged battery 68°F(20°C)	≤3.0 mOhms
Self-Discharge	3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Dimension	Length (mm / inch)	520 / 20.5
	Width (mm / inch)	269 / 10.6
	Height (mm / inch	227 / 8.7
	Total Height (mm / inch)	227 / 8.9
Approx. Weight (Kg / lbs)	74.0 / 163.1	
Operating Temperature Range (temporarily – see our manual)	Discharge : -20~50°C Charge : -10~50°C Storage : -20~50°C	
Max. Discharge Current 68°F(20°C)	1250A(5s)	
Short Circuit Current	4300A	
Charge Methods: Constant Voltage Charge 68°F(20°C)	Cycle use	2.40-2.45VPC
	Maximum charging current	75.0A
	Temperature compensation	-30mV/°C
	Standby use	2.20-2.30VPC
	Temperature compensation	-20mV/°C
Life expectancy	10~12 years at 20°C with charge voltage 2.25V/cell	

Applications

- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.*
- *Not restricted for air transport-complies with IATA/ICAO Special Provision A67.*
- *UL-recognized component.*
- *Can be mounted in any orientation.*
- *Computer designed lead, calcium tin alloy grid for high power density.*
- *Long service life, float or cyclic applications.*
- *Maintenance-free operation.*
- *Low self discharge.*
- *Case and cover available in both standard and flame retardant ABS.*

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Comform to:
IEC60896-21&22 and/or IEC61427

Discharge Constant Current (Amperes at 68°F20°C)

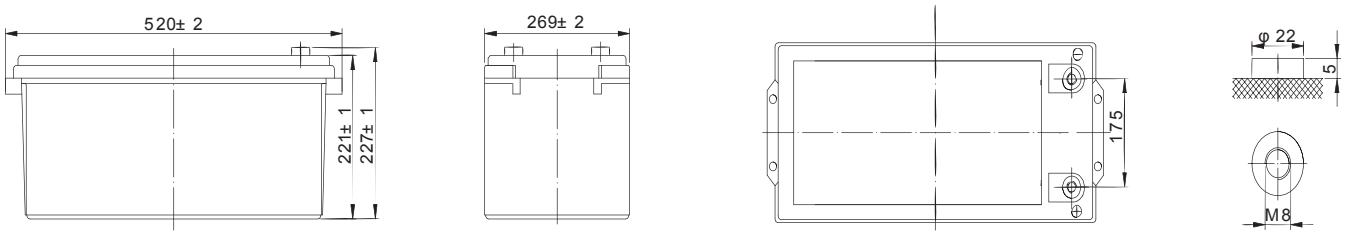
End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V	-	463	274	195	160	72.3	47.2	26.6	-
1.65V	-	430	258	186	153	69.5	45.5	26.4	-
1.70V	-	415	252	182	150	68.3	44.8	26.3	-
1.75V	-	386	240	178	146	66.3	43.5	26.2	-
1.80V	-	357	229	176	142	64.2	42.5	26.0	-

Discharge Constant Current (Watts at 68°F20°C)

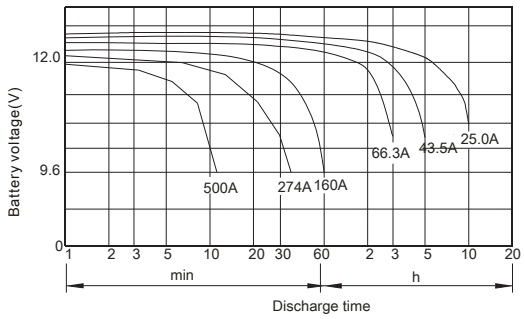
End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	10h
1.60V	-	810	497	361	300	182	135	91.0	-
1.65V	-	770	475	347	291	175	133	88.2	-
1.70V	-	747	465	343	285	172	131	87.0	-
1.75V	-	705	449	332	278	165	127	85.2	-
1.80V	-	660	434	325	268	160	123	83.2	-

Updated: 07.01.2019

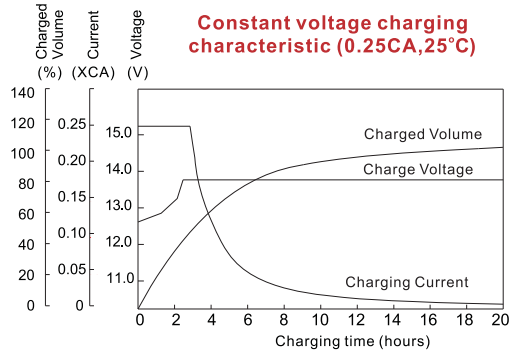
Dimensions



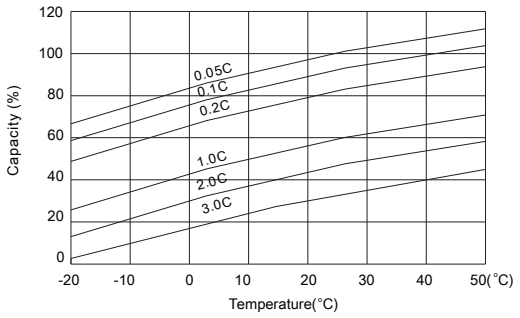
Discharge Characteristics



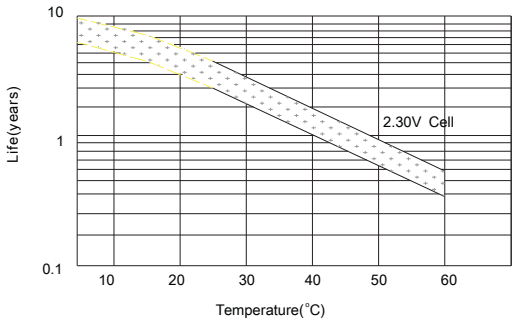
Float Charging Characteristics



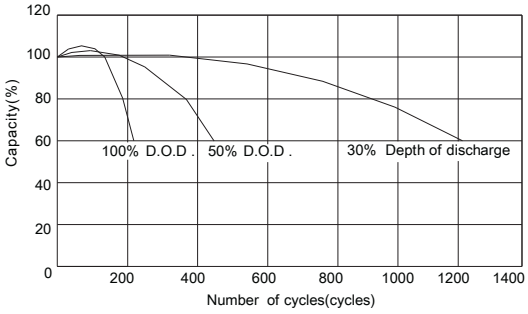
Temperature Effects in Relation to Battery Capacity



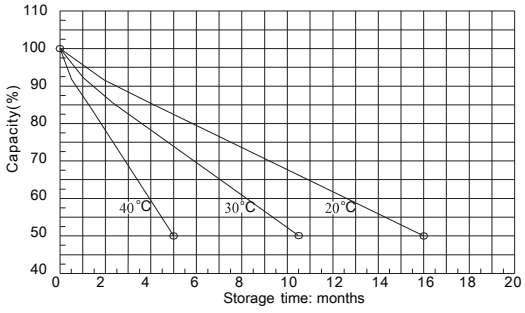
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

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