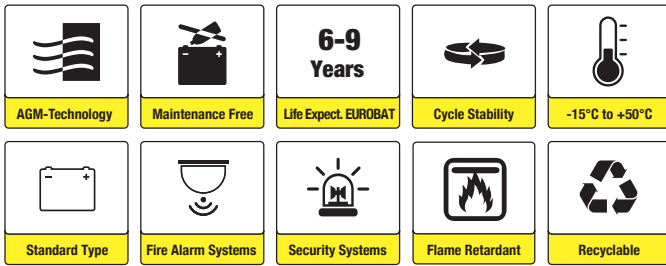




# SB12-7 ES (12V7Ah)

Item Nr.: 2037969



## Applications

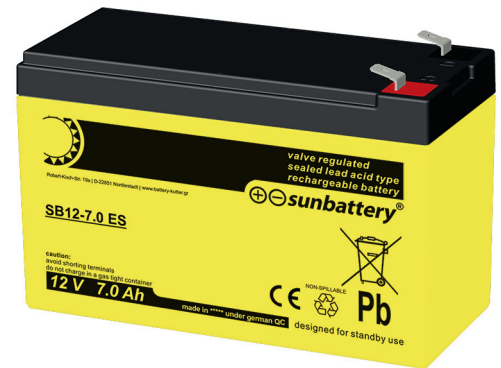
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Alarm and security system
- Communication power supply
- DC power supply

## Certificates

Conform to IEC60896-21&22

## Specifications

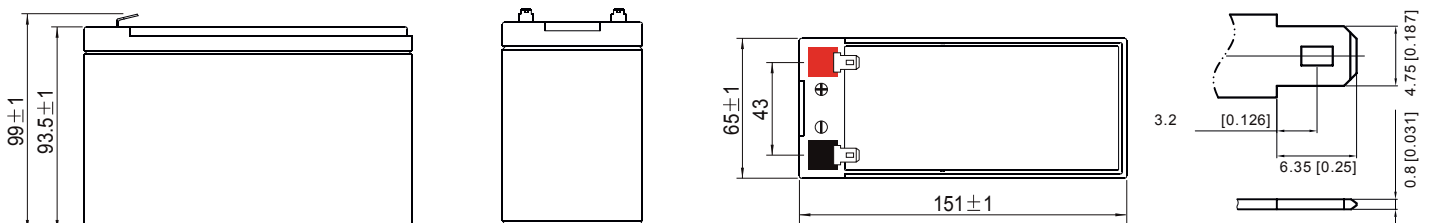
<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	7Ah (C <sub>20</sub> 10.8V)	<b>Float Charge</b>	2.277V/cell@20°C, 2.260V/cell @25°C Charging Current: 0.1-0.3C Temperature Coefficient: -3.3mV/cell/°C
<b>Approx. Weight</b>	2.0kg	<b>Boost Charge</b>	2.367V/cell@20°C, 2.350V/cell@25°C Charging Current: 0.1-0.3C Temperature Coefficient: -3.3mV/cell/°C
<b>Terminal</b>	T1	<b>Capacity affected by Temp.</b>	40°C 103% 25°C 100% 0°C 86%
<b>Container Material</b>	ABS UL94 HB	<b>Self Discharge</b>	SB batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.
<b>Rated Capacity (25°C)</b>	7.00Ah/0.35A, 20hr, 10.8V 6.9Ah/0.69A, 10hr, 10.8V 5.6Ah/1.12A, 5hr, 10.5V 5.07Ah/1.69A/3hr, 10.5V 4.8Ah/4.8A/1hr, 9.6V	<b>Life Expectancy</b>	6-9 years according to EUROBAT (General Purpose)
<b>Max. Discharge Current</b>	105A (5s)		
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 27mΩ		
<b>Operating Temp. Range</b>	Discharge: -15~50°C Charge: -15~45°C Storage: 5~30°C		



## Dimensions

### ■ T1 Terminal

Unit: mm | Dimensions: 151 Length X 65 Width X 93.5 Height (99 Height incl. Terminal)





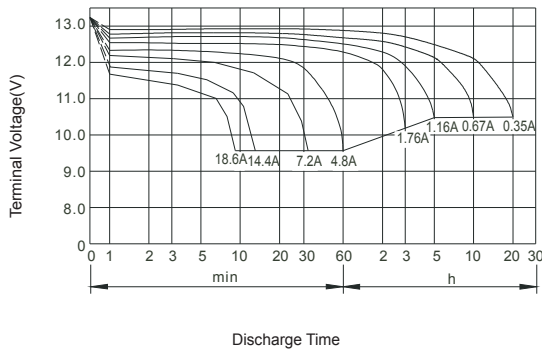
### Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.60V/cell	30.0	18.8	15.3	8.50	6.48	4.80	2.77	1.88	1.25	0.71	0.38
1.65V/cell	28.4	17.9	14.6	8.15	6.25	4.63	2.60	1.82	1.20	0.70	0.38
1.70V/cell	26.8	17.0	13.9	7.86	6.02	4.44	2.52	1.76	1.16	0.70	0.37
1.75V/cell	25.2	16.0	13.2	7.56	5.75	4.25	2.45	1.69	1.12	0.69	0.36
1.80V/cell	23.5	15.1	12.5	7.18	5.46	4.04	2.39	1.64	1.10	0.67	0.35

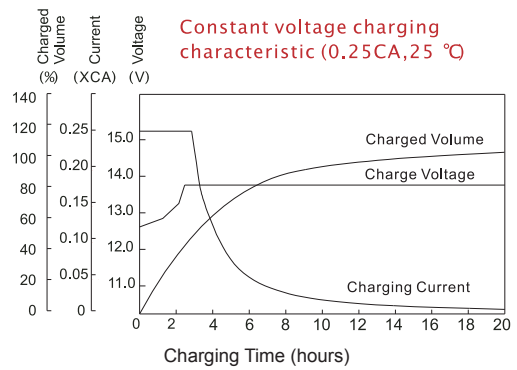
### Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.60V/cell	53.3	35.8	28.1	15.5	11.8	9.30	5.13	3.68	2.38	1.31	0.56
1.65V/cell	50.7	34.0	27.0	14.9	11.3	8.90	5.02	3.59	2.34	1.30	0.56
1.70V/cell	48.1	32.2	25.9	14.3	10.8	8.53	4.89	3.49	2.30	1.30	0.55
1.75V/cell	45.6	30.4	24.8	13.7	10.4	8.28	4.73	3.38	2.25	1.29	0.54
1.80V/cell	43.1	28.6	23.8	13.2	10.0	7.90	4.58	3.27	2.19	1.28	0.53

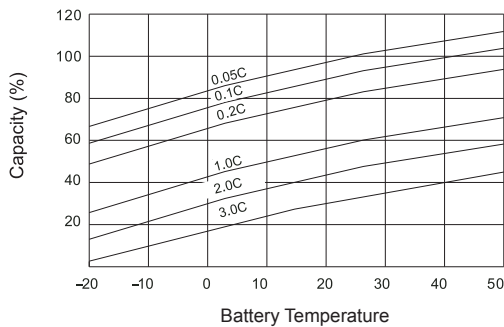
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

