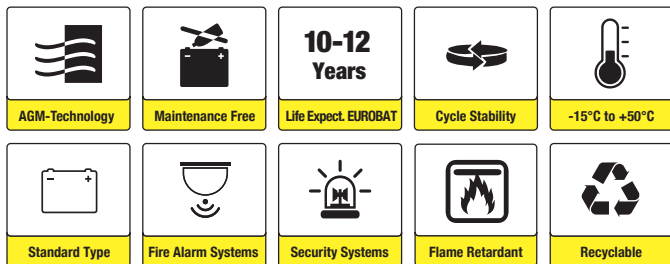




SB12-40V0 (12V40Ah)



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

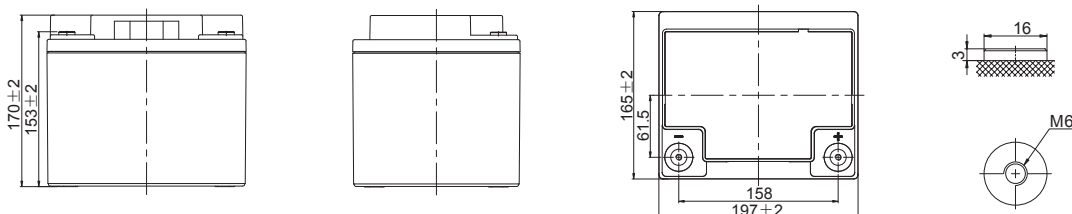
Specifications

Nominal Voltage	12V	Nominal Oper. Temp. R.	25±3°C
Nominal Capacity	40.0Ah (C ₂₀ ⁰ 1.80V/cell)	Cycle Use	Initial Charging Current less than 12.0A. Voltage 14.7V +1% at 25°C. Temperature Coefficient -30mV/°C.
Approx. Weight	13.2kg	Standby Use	No limit on Initial Charging Current. Voltage 13.65V +1% at 25°C Temp. Coefficient -20mV/°C
Terminal	M6	Capacity affected by Temp.	40°C 103% 25°C 100% 0°C 86%
Container Material	ABS UL94 V0	Self Discharge	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.
Rated Capacity (25°C)	40.0Ah/2A, 20hr, 1.80V/cell 38.0Ah/3.8A, 10hr, 1.80V/cell 33.5Ah/6.7A, 5hr, 1.75V/cell 30.3Ah/10.1A, 3hr, 1.75V/cell 24.2Ah/24.2A, 1hr, 1.60V/cell	Life Expectancy	10-12 years according to EUROBAT
Max. Discharge Current	456A (5s)		
Internal Resistance / Impedance (1kHz)	Approx. 10mΩ		
Operating Temp. Range	Discharge: -15~50°C Charge: 0~40°C Storage: -15~40°C		

Dimensions

■ M6 Terminal

Unit: mm | Dimensions: 197 Length X 165 Width X 170 Height (170 Height incl. Terminal)





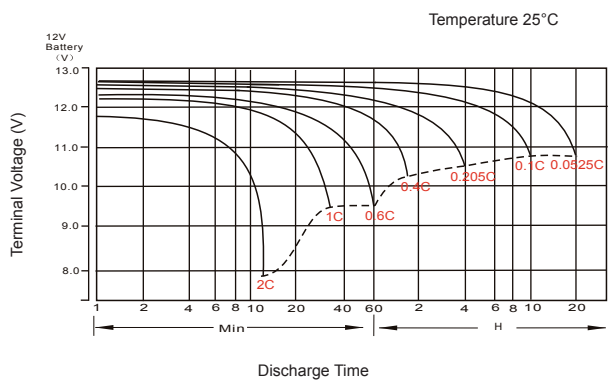
Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	70.9	55.5	46.8	39.0	31.7	23.3	18.7	11.6	9.22	7.15	6.09	5.34	4.34	3.59	1.98
1.80V/cell	95.2	70.9	56.6	46.0	37.3	27.1	21.0	12.6	9.92	7.64	6.54	5.73	4.60	3.80	2.00
1.75V/cell	107.3	77.8	61.8	49.5	38.7	28.1	21.9	13.2	10.10	7.80	6.70	5.89	4.68	3.84	2.02
1.70V/cell	118.2	84.8	66.0	52.1	40.3	29.2	22.6	13.7	10.39	8.00	6.88	6.01	4.74	3.87	2.05
1.65V/cell	130.3	91.5	70.2	55.4	42.5	29.9	23.4	14.0	10.86	8.29	7.07	6.14	4.82	3.96	2.08
1.60V/cell	143.7	99.4	75.1	59.0	44.9	31.2	24.2	14.6	11.19	8.55	7.30	6.27	4.87	4.00	2.09

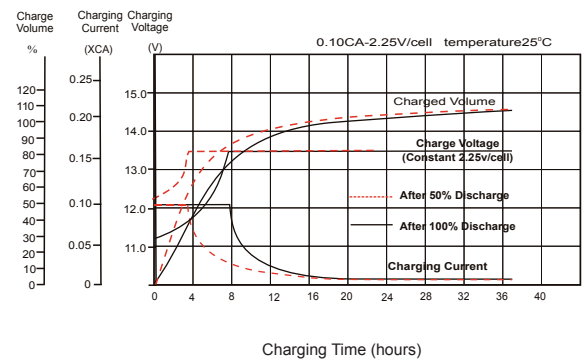
Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	129.70	102.35	87.45	73.40	60.21	44.62	36.03	22.58	17.96	13.99	11.98	10.50	8.57	7.11	3.93
1.80V/cell	172.17	129.28	104.24	85.57	70.00	51.55	40.21	24.40	19.25	14.80	12.73	11.20	9.06	7.52	3.96
1.75V/cell	189.97	139.78	112.40	91.10	72.07	53.01	41.86	25.26	19.47	15.11	13.05	11.53	9.19	7.58	3.99
1.70V/cell	203.40	148.90	118.41	95.04	74.60	54.91	43.06	26.22	20.01	15.52	13.38	11.74	9.31	7.64	4.06
1.65V/cell	221.19	159.17	124.88	100.23	78.06	55.80	44.16	26.76	20.76	15.93	13.70	11.96	9.44	7.79	4.12
1.60V/cell	238.29	168.87	131.34	105.64	81.86	57.82	45.48	27.51	21.30	16.44	14.13	12.18	9.50	7.86	4.13

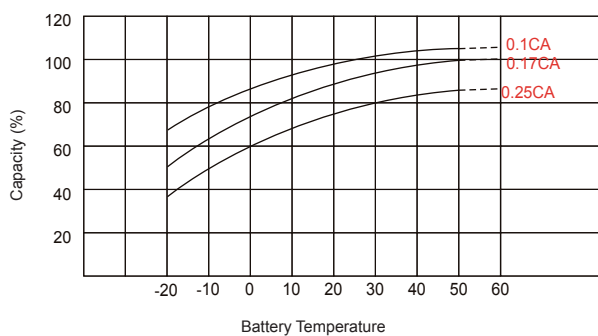
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

