



SBL40-12i (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

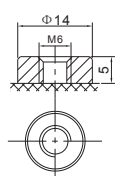
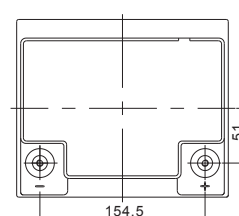
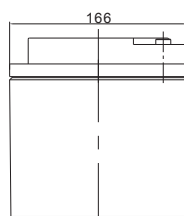
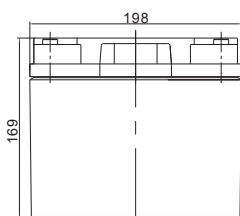
Specifications

Nominal Voltage	12V	Operating Temp. Range	Discharge:	-15~50°C
Nominal Capacity	40.0Ah (C ₁₀ , 10.8V)		Charge:	-20~40°C
Approx. Weight	12.40kg		Storage:	-15~40°C
Terminal	M6	Float Charge	2.285V/cell ± 0.5 % @ 20°C	
Container Material	ABS UL94 HB		Charging Current:	0.1-0.2C
Rated Capacity (20°C)	42Ah/2.10A, 20hr, 10.8V		Temperature coefficient:	-3mV/cell/°C
	40.0Ah/4.0A, 10hr, 10.8V	Capacity affected by Temp.	40°C	103%
	38.96Ah/4.87A, 8hr, 10.5V		25°C	100%
	34.9Ah/6.98A, 5hr, 10.5V		0°C	86%
	30.9Ah/10.3A, 3hr, 10.5V	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.	
	24.4Ah/24.4A, 1hr, 9.6V	Life Expectancy	10-12 years according to EUROBAT	
Max. Discharge Current	400A (5s)			
Internal Resistance / Impedance (1kHz)	Approx. 10mΩ			
Nominal Oper. Temp. R.	20±2°C			

Dimensions

■ M6 Terminal

Unit: mm | Dimensions: 198±2 Length X 166±2 Width X 169±2 Height (169±2 Height incl. Terminal)



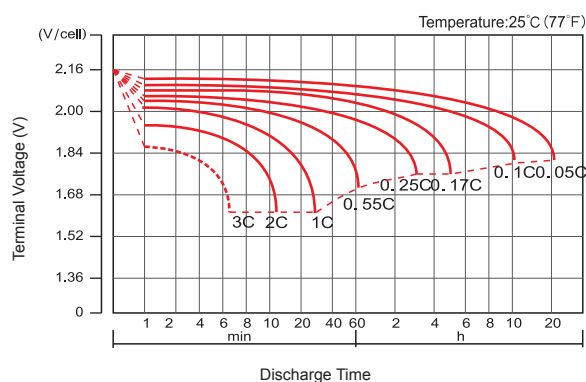
Constant Current Discharge (Amperes) at 20°C

End Point	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	124.3	95.7	73.4	43.4	24.4	14.6	11.3	8.87	7.55	5.07	4.22	2.21
1.65V/cell	119.8	90.4	70.2	41.6	23.6	14.1	10.9	8.63	7.35	5.01	4.17	2.17
1.70V/cell	114.0	83.2	65.7	39.8	22.8	13.6	10.6	8.39	7.16	4.94	4.11	2.15
1.75V/cell	106.5	76.2	61.2	38.0	22.0	13.2	10.3	8.18	6.98	4.87	4.05	2.12
1.80V/cell	97.0	69.0	56.5	36.4	21.2	12.7	10.0	7.94	6.80	4.79	4.00	2.10
1.85V/cell	85.4	56.4	46.9	31.3	19.0	11.6	9.24	7.38	6.34	4.49	3.77	1.99

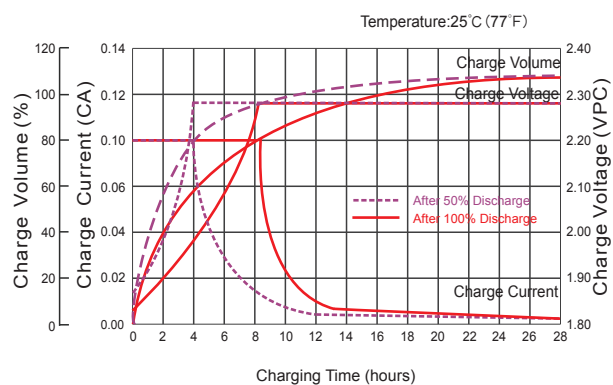
Constant Power Discharge (Watts/cell) at 20°C

End Point	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	213.9	162.6	128.4	78.8	45.9	27.6	21.5	17.0	14.5	9.90	8.30	4.35
1.65V/cell	211.7	156.6	124.5	76.4	44.6	26.8	21.0	16.6	14.2	9.81	8.21	4.28
1.70V/cell	203.6	146.9	118.4	73.8	43.4	26.1	20.5	16.2	13.9	9.68	8.09	4.24
1.75V/cell	193.6	136.8	111.8	71.2	42.1	25.3	20.0	15.9	13.6	9.57	8.00	4.19
1.80V/cell	179.5	126.0	104.7	68.8	40.7	24.5	19.4	15.5	13.3	9.43	7.90	4.15
1.85V/cell	160.8	104.8	88.1	59.8	36.7	22.6	18.0	14.4	12.4	8.87	7.45	3.95

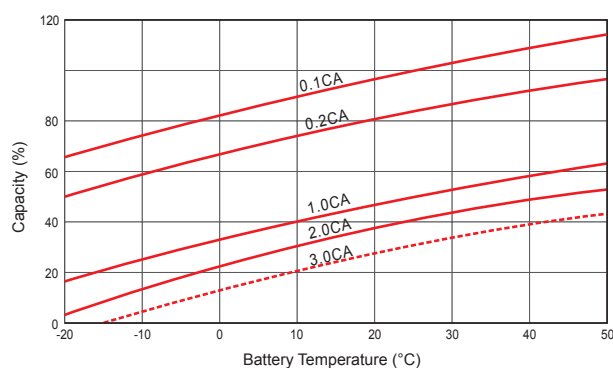
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

