



12V

50Ah

SLA

AGM

12SB50TL

Rechargeable AGM Sealed Lead Acid Battery

SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	50Ah	
20 hour rate (2.50A to 10.50V)	50Ah	
10 hour rate (4.75A to 10.50V)	47.5Ah	
5 hour rate (8.50A to 10.20V)	42.5Ah	
1C (40A to 9.60V)	31.67Ah	
3C (150A to 9.60V)	20Ah	
Weight	Approx. 14.8kg	
Internal Resistance (at 1KHz)	Approx. 5mΩ	
Maximum Discharge Current (5 secs)	600A	
Charge Methods at 25°C		
Standby Use		
Float Charging Voltage	13.5V to 13.8V	
Coefficient -3.0mV/°C/Cell		
Maximum Charging Current	15A	
Operating Temperature Range		
Charge	-15°C to 40°C	
Discharge	-15°C to 50°C	
Storage	-15°C to 40°C	
Charge Retention (Shelf Life) at 20°C		
1 month	98%	
3 months	94%	
6 months	85%	
Case Material	ABS UL94 HB	
Termination	F8 (M6 Bolt)	

Description of Torque Value of Hardware for the Terminals

Recommended Torque Value	M6: 7 N-m (71kgf-cm)
Max. Allowable Torque Value	M6: 9 N-m (92kgf-cm)

Design Life	6-9 years at 20°C
Expected Trickle Design Life	

- Classified as a non-spillable battery. Approved for transportation by:**
- Air (IATA/ICAO provision A67)
 - Road
 - Sea (per IMDG Special Provision 238)



Barcode

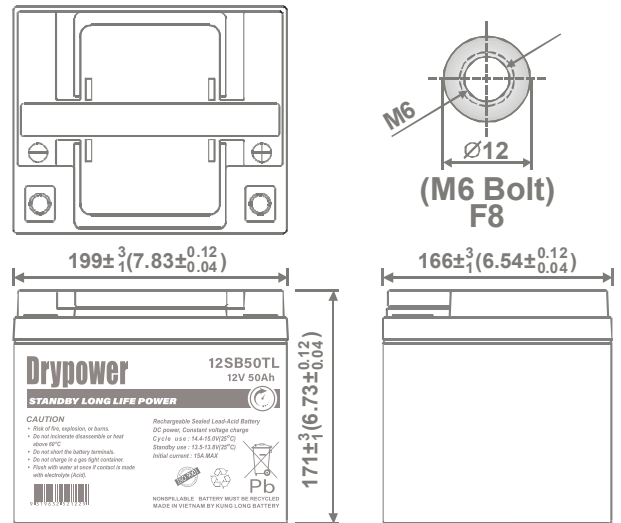


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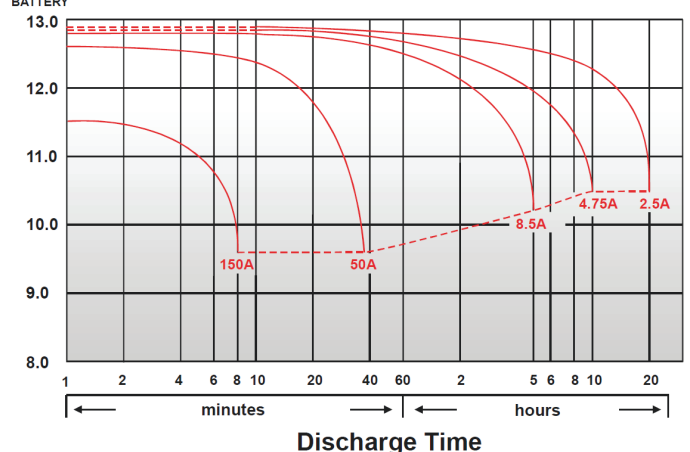


DIMENSIONS

mm (inch)

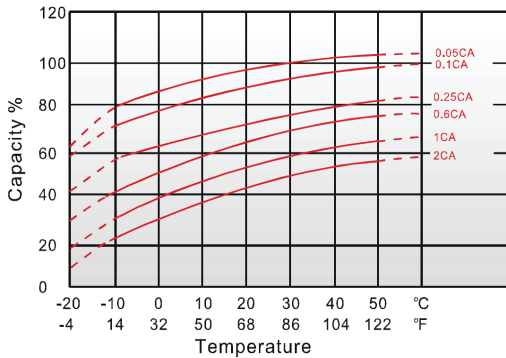


Discharge Time VS. Discharge Current (25°C)

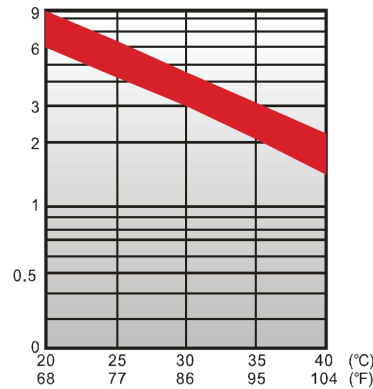


CHARACTERISTICS CHARTS

Effect of Temperature on Capacity 25°C(77°F)



Trickle (or float) Service Life

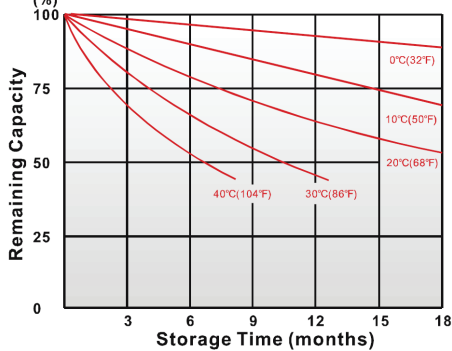


FEATURES & BENEFITS

- ◆ Industry leading 99.99% pure lead content for superior service life and dependable performance.
- ◆ Long service life to reduce maintenance and logistical costs across telecom, utilities and off-grid applications.
- ◆ Minimises sulphation with a thicker plate design and higher percentage of tin content to maximise battery standby life.
- ◆ High rate discharge capable to ensure reliable performance.
- ◆ Maintenance free technology and non-spillable design.
- ◆ Manufactured by Kung Long Battery (KLB) at facilities in Taiwan and Vietnam. KLB is a leading manufacturer and complies with relevant international quality standards including ISO9001, CE ETL9000, UL1989, OHSAS18001 and ISO17025. KLB supports Green Sustainable supply chain practices.



Capacity Retention Characteristic



PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C (77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	240	288	322	345	350	356	361
10	min	171	203	223	233	237	241	246
15	min	126	146	160	167	170	172	175
30	min	78	89.8	97.2	100	102	103	104
60	min	53.7	56.5	58.2	59.5	60	60.7	61.2
120	min	29.2	32	33.3	34.5	34.8	35.3	35.8
180	min	20.8	22.7	23.8	24.7	25	25.3	25.7
240	min	17.2	18.3	19	19.7	19.8	20.2	20.5
300	min	15.9	16.6	17	17.3	17.50	17.7	17.8
600	min	8.62	9.1	9.38	9.57	9.62	9.68	9.77
1200	min	4.58	4.87	5.05	5.17	5.2	5.25	5.3

Discharge Rates in Amperes to Various End Voltages at 25°C (77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	139	166	185	199	206	210	214
10	min	88.5	106	117	125	128	131	134
15	min	77.8	84.5	87.6	90.2	90.9	91.8	92.9
30	min	45.4	50.7	52.8	54.4	54.9	55.5	56.2
60	min	26	28.8	29.9	30.6	30.8	31.1	31.4
120	min	15.1	16.2	16.8	17.3	17.5	17.7	17.9
180	min	11	11.7	12.1	12.4	12.5	12.6	12.7
240	min	8.96	9.44	9.7	9.89	9.96	10.1	10.2
300	min	7.85	8.26	8.5	8.67	8.73	8.8	8.87
600	min	4.41	4.65	4.76	4.82	4.84	4.87	4.91
1200	min	2.32	2.44	2.5	2.55	2.57	2.59	2.61

All data on the spec. sheet is an average value:

The tolerance range : X < 6min (+15%~-15%), 6min ≤ X < 10min (+12%~-12%), 10min ≤ X < 60min (+8%~-8%), X ≥ 60min (+5%~-5%)

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Performance may vary depending on application. All specifications are correct at time of creation. All specifications and operation conditions contained in this datasheet are subject to change or improvement without prior notice to the user. This data is for evaluation purposes only. No guarantee is intended or implied by this data. For clarification and updated information, please contact us.