



12V

45Ah

SLA

AGM

## 12SB45TL

Rechargeable AGM Sealed Lead Acid Battery

### SPECIFICATIONS

<b>Nominal Voltage</b>	12V	
<b>Nominal Capacity</b>		
20 hour rate (2.250A to 10.50V)	45Ah	
10 hour rate (4.275A to 10.50V)	42.75Ah	
5 hour rate (7.650A to 10.20V)	38.25Ah	
1C (45A to 9.60V)	28.5Ah	
3C (135A to 9.60V)	18Ah	
<b>Weight</b>	Approx. 14.6kg	
<b>Internal Resistance (at 1KHz)</b>	Approx. 7.5mΩ	
<b>Maximum Discharge Current (5 secs)</b>	540A	
<b>Charge Methods at 25°C</b>		
<b>Standby Use</b>		
Float Charging Voltage	13.5V to 13.8V	
Coefficient -3.0mV/°C/Cell		
Maximum Charging Current	13.5A	
<b>Operating Temperature Range</b>		
<b>Charge</b>	-15°C to 40°C	
<b>Discharge</b>	-15°C to 50°C	
<b>Storage</b>	-15°C to 40°C	
<b>Charge Retention (Shelf Life) at 20°C</b>		
1 month	92%	
3 months	90%	
6 months	80%	
<b>Case Material</b>	ABS UL94 HB	
<b>Termination</b>	F4 (M6 Bolt & Nut)	

#### Description of Torque Value of Hardware for the Terminals

Recommended Torque Value  
Max. Allowable Torque Value

N/A

<b>Design Life</b> Expected Trickle Design Life	6-9 years at 20°C
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**Classified as a non-spillable battery.**  
**Approved for transportation by:**

- Air (IATA/ICAO provision A67)
- Road
- Sea (per IMDG Special Provision 238)

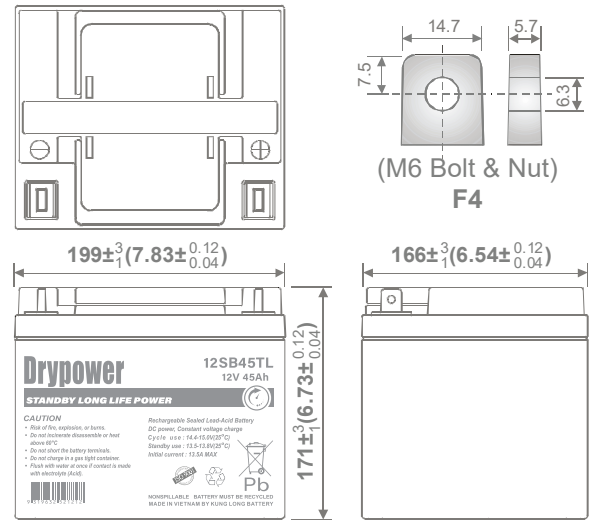


**Barcode**

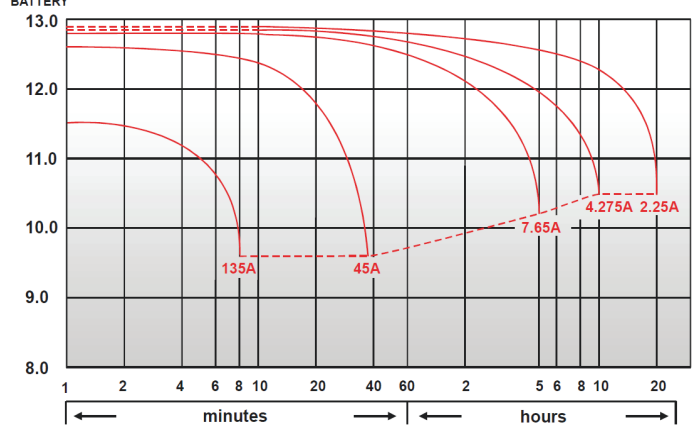


### DIMENSIONS

mm (inch)

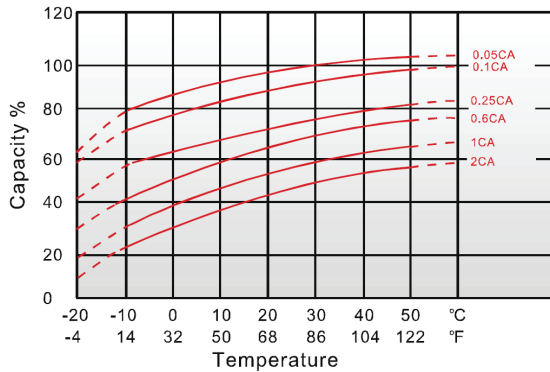


### (V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)

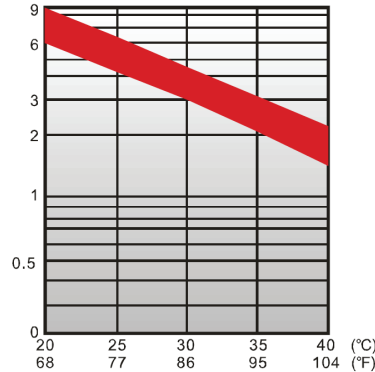


## CHARACTERISTICS CHARTS

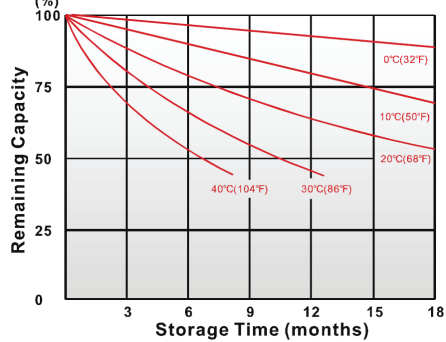
Effect of Temperature on Capacity 25°C(77°F)



Trickle (or float) Service Life



Capacity Retention Characteristic



## 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.



## 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	233	280	314	336	341	347	354
10	min	148	178	200	214	217	221	225
15	min	116	136	150	159	162	164	167
30	min	62	73	80.5	85.4	86.5	88.1	89.4
60	min	48.8	51.8	53.6	54.9	55.3	55.9	56.4
120	min	25.7	27.3	28.2	28.9	29.2	29.5	29.7
180	min	20.5	21.8	22.5	23.1	23.2	23.5	23.7
240	min	16.4	17.4	18	18.4	18.7	18.8	19
300	min	14	14.9	15.4	15.7	15.90	16	16.2
600	min	8.23	8.74	9.04	9.26	9.35	9.44	9.52
1200	min	4.34	4.61	4.76	4.88	4.93	4.98	5.02

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	127	153	171	183	186	190	193
10	min	79.5	95.6	107	114	116	118	121
15	min	60.3	71	78.3	83.1	84.2	85.6	87
30	min	31.7	37.3	41.1	43.6	44.2	45	45.7
60	min	24.6	26.1	27	27.7	27.9	28.2	28.4
120	min	12.9	13.7	14.2	14.6	14.7	14.8	14.9
180	min	10.3	10.9	11.3	11.5	11.6	11.8	11.9
240	min	8.20	8.7	9	9.22	9.31	9.4	9.48
300	min	6.97	7.4	7.65	7.84	7.91	7.99	8.06
600	min	4.1	4.35	4.5	4.61	4.65	4.7	4.74
1200	min	2.15	2.28	2.36	2.42	2.44	2.47	2.49

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.