



12V

140Ah

SLA

AGM

## 12SB145TL-FR

Rechargeable AGM Sealed Lead Acid Battery

### SPECIFICATIONS

<b>Nominal Voltage</b>	12V	
<b>Nominal Capacity</b>		
20 hour rate	(7.04A to 10.50V)	140Ah
10 hour rate	(13.0A to 10.80V)	130Ah
5 hour rate	(22.1A to 10.20V)	110.5Ah
1 hour rate	(78A to 9.60V)	78Ah
<b>Weight</b>	Approx. 42.6kg	
<b>Internal Resistance</b> (at 1KHz)	Approx. 5mΩ	
<b>Maximum Discharge Current</b> (5 secs)	1300A	
<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	42A	
<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	98%	
3 months	94%	
6 months	85%	
<b>Case Material</b>	UL94 V-0 Flame Retardant	
<b>Termination</b>	F18 (M8 Bolt)	

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

Recommended Torque Value M8: 12 N-m (122kgf-cm)  
Max. Allowable Torque Value M8: 15 N-m (153kgf-cm)

<b>Design Life</b>	10-12 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



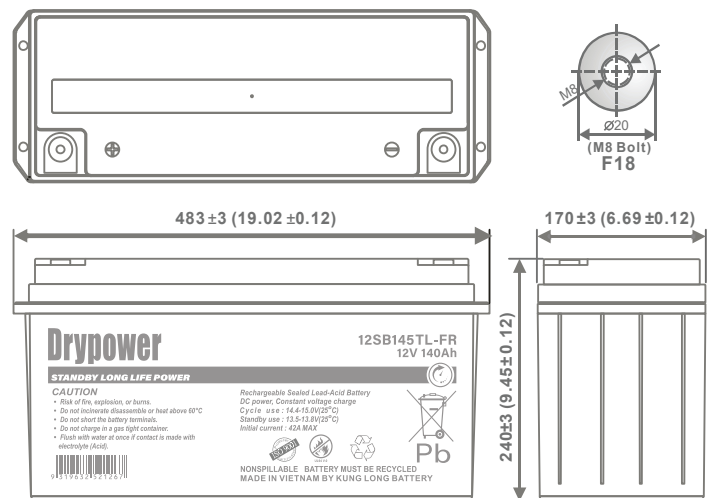
9319632521267



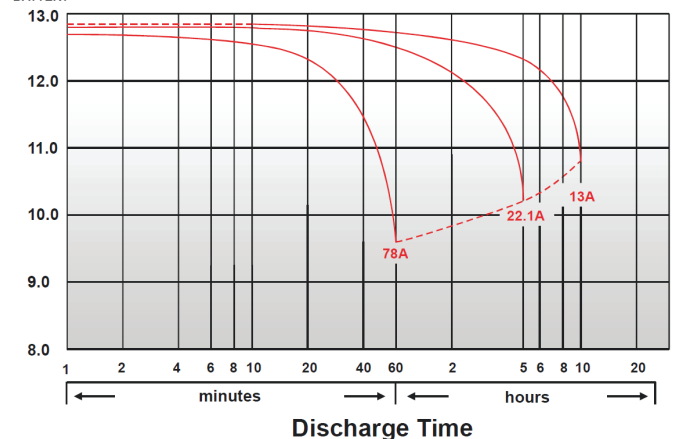
UL94 V-0  
FLAME RETARDANT  
CASE

### DIMENSIONS

mm (inch)

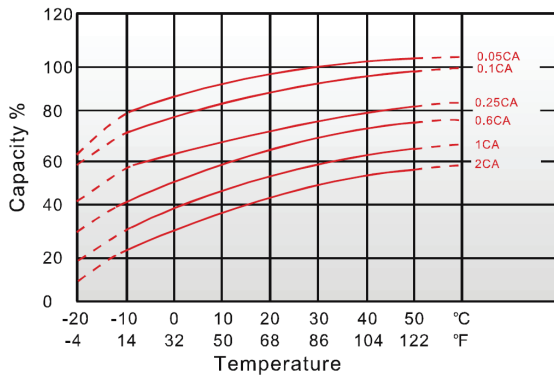


### Discharge Time VS. Discharge Current (25°C)

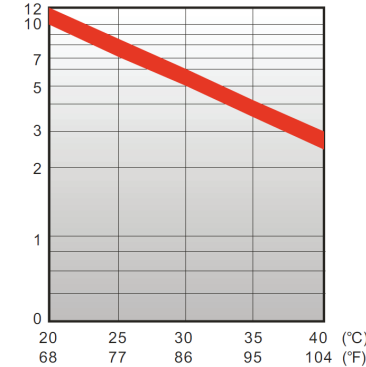


### CHARACTERISTICS CHARTS

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



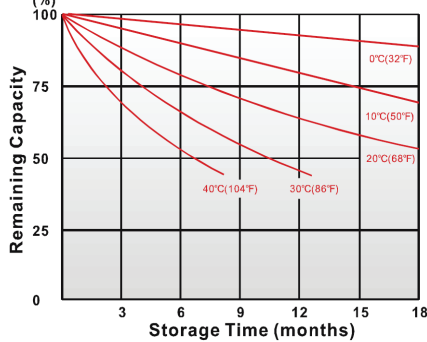
Trickle (or float) Service Life



### 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	425	442	537	580	614	633	673
10	min	315	368	450	472	497	510	533
15	min	307	345	357	371	388	396	411
20	min	275	289	301	315	327	333	345
30	min	221	230	237	245	253	257	264
60	min	142	144	147	149	152	153	156
90	min	115	121	123	125	125	126	127
120	min	92.2	96.5	98.4	100	100	100	101
180	min	61.8	64.7	66	66.8	67.1	67.3	67.8
240	min	51.3	53.6	54.7	55.3	55.6	55.8	56.1
300	min	43.1	45.1	46	46.5	46.7	46.9	47.2
480	min	29.3	30.6	31.2	31.6	31.7	31.8	32
600	min	24.6	25.7	26.3	26.6	26.7	26.7	26.9
1200	min	13.3	13.9	14.2	14.3	14.4	14.4	14.5

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	225	255	310	335	358	368	389
10	min	180	210	253	270	284	291	304
15	min	170	192	194	204	213	218	226
20	min	150	158	164	172	178	182	188
30	min	114	119	123	127	131	133	137
60	min	71.7	72.8	74	75.3	76.4	77.3	78.7
90	min	58	60.8	62	62.7	63.1	63.3	63.8
120	min	46.30	48.5	49.4	50	50.3	50.4	50.8
180	min	30.9	32.4	33	33.4	33.6	33.7	33.9
240	min	25.5	26.7	27.2	27.6	27.7	27.8	28
300	min	21.5	22.5	22.9	23.2	23.3	23.3	23.5
480	min	14.6	15.2	15.5	15.7	15.8	15.8	15.9
600	min	12.2	12.8	13.1	13.2	13.3	13.3	13.4
1200	min	6.6	6.89	7.04	7.12	7.14	7.16	7.19

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%)

Aug2020

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.