



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



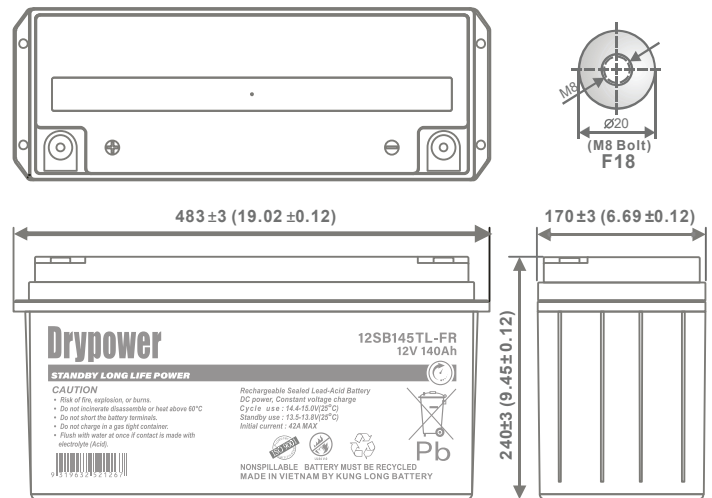
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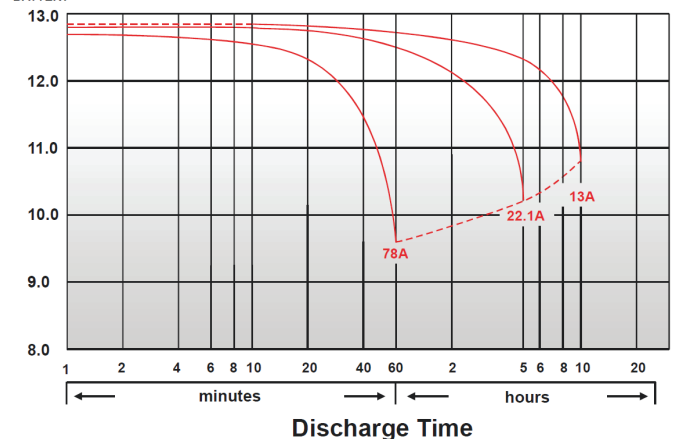
UL94 V-0  
FLAME RETARDANT  
CASE

### DIMENSIONS

mm (inch)

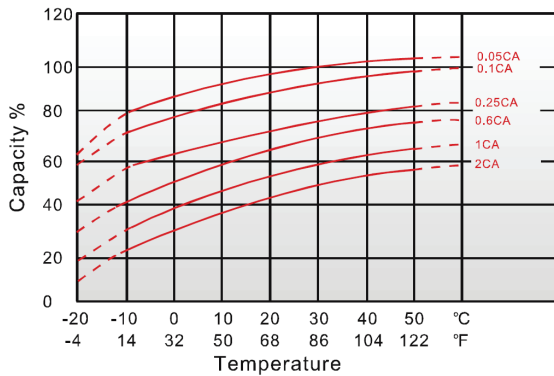


#### Discharge Time VS. Discharge Current (25°C)

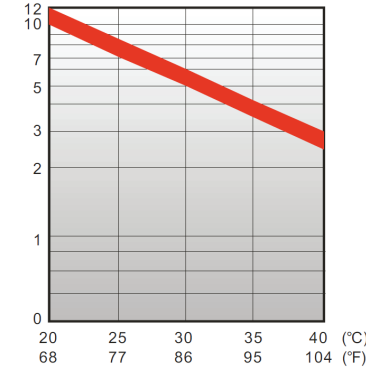


### CHARACTERISTICS CHARTS

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



Trickle (or float) Service Life

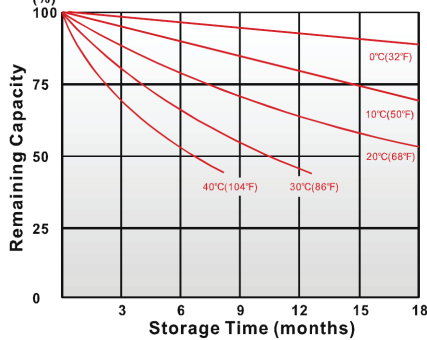


### FEATURES & BENEFITS

- ◆ 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%)

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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.