



12V

28Ah

SLA

AGM

## 12SB28TL

Rechargeable AGM Sealed Lead Acid Battery

### SPECIFICATIONS

<b>Nominal Voltage</b>	12V	
<b>Nominal Capacity</b>		
20 hour rate (1.40A to 10.50V)	28Ah	
10 hour rate (2.66A to 10.50V)	26.6Ah	
5 hour rate (4.76A to 10.20V)	23.8Ah	
1C (28A to 9.60V)	17.73Ah	
3C (84A to 9.60V)	11.2Ah	
<b>Weight</b>	Approx. 9.18kg	
<b>Internal Resistance (at 1KHz)</b>	Approx. 9.4mΩ	
<b>Maximum Discharge Current (5 secs)</b>	420A	
<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	8.4A	
<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>	F6 (M5 Bolt)	

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

Recommended Torque Value	M5: 5 N-m (51kgf-cm)
Max. Allowable Torque Value	M5: 5 N-m (61kgf-cm)

<b>Design Life</b>	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

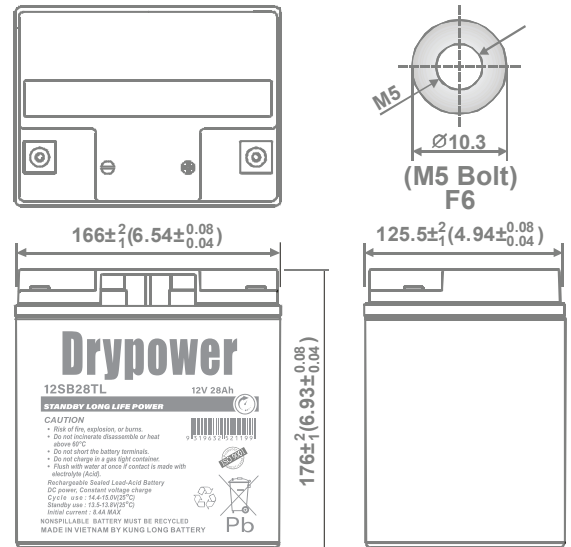


9319632521199

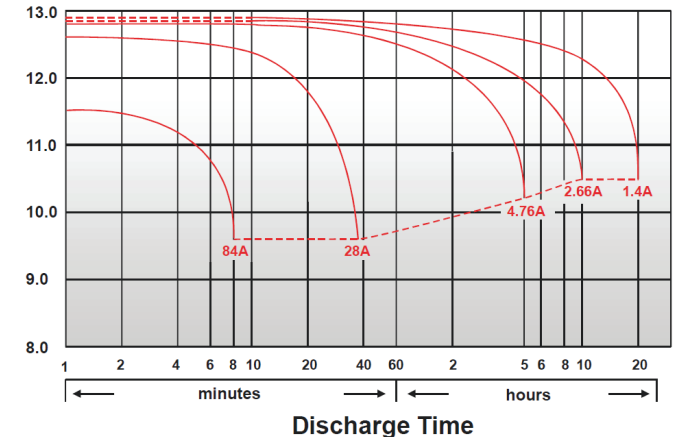


### DIMENSIONS

mm (inch)

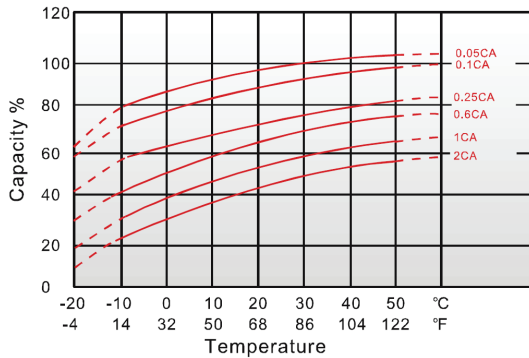


### (V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)

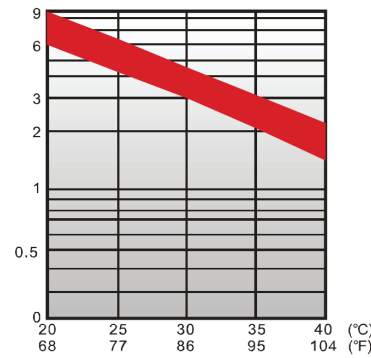


## CHARACTERISTICS CHARTS

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



Trickle (or float) Service Life

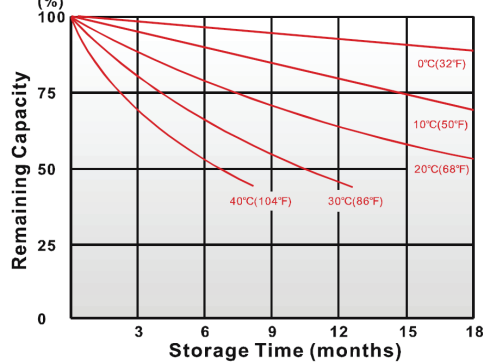


## FEATURES & BENEFITS

- ◆ 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	1.75V	1.70V	1.65V	1.60V
Time						
5	min	153	164	172	183	194
10	min	131	133	138	144	146
15	min	103	105	108	110	112
20	min	89.8	91	94.7	96.7	97.7
30	min	62.4	64.4	66.3	67.4	68.5
45	min	42.7	47.4	43.2	49.2	50.9
60	min	36.8	41.4	42	42.5	43.5
90	min	25	25.9	26	26.2	26.7
120	min	19.8	21.1	21.3	21.5	21.7
180	min	14.2	14.8	15	15.3	15.5
240	min	11.9	12.1	12.2	12.3	12.5
300	min	10.1	10.2	10.3	10.4	10.6
480	min	6.8	7.2	7.28	7.53	7.68
600	min	5.31	5.32	5.33	5.34	5.35
1200	min	2.81	2.82	2.83	2.84	2.85

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

End Voltage		1.85V	1.75V	1.70V	1.65V	1.60V
Time						
5	min	83	88.5	93	99	105
10	min	70	71.2	73.5	76.8	78.3
15	min	53.6	54.7	56	57	58.1
20	min	46.8	47.3	48.9	49.9	50.5
30	min	32.2	33.3	34.1	34.9	36
45	min	22.1	23.9	24.6	25.3	26.2
60	min	18.7	21.2	21.7	22.2	22.9
90	min	12.8	13.2	13.6	13.8	14.1
120	min	10.2	10.7	10.8	10.9	11
180	min	7.11	7.42	7.52	7.62	7.73
240	min	5.92	5.97	6.2	6.31	6.42
300	min	4.98	5.11	5.15	5.2	5.22
480	min	3.38	3.47	3.49	3.53	3.55
600	min	2.62	2.66	2.67	2.68	2.69
1200	min	1.41	1.42	1.43	1.44	1.45

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.