



12V

110Ah

SLA

CYCLIC
AGM

12SB110CLS-FR

Rechargeable AGM Sealed Lead Acid Battery

SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity		
20 hour rate	(5.44A to 9.60V)	108.8Ah
10 hour rate	(10A to 10.80V)	100Ah
5 hour rate	(17A to 10.20V)	85Ah
1 hour rate	(60A to 9.60V)	60Ah
1C	(100A to 9.60V)	63.33Ah
Weight	Approx. 30.0kg	
Internal Resistance (at 1KHz)	Approx. 5mΩ	
Maximum Discharge Current (5 secs)	1200A	
Charge Methods at 25°C		
Cycle Use		
Charging Voltage	14.4V to 15.0V	
Coefficient	-5.0mV/°C/Cell	
Maximum Charging Current	33A	
Standby Use		
Float Charging Voltage	13.5V to 13.8V	
Coefficient	-3.0mV/°C/Cell	
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	UL94 V-0 Flame Retardant
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	12 years
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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)

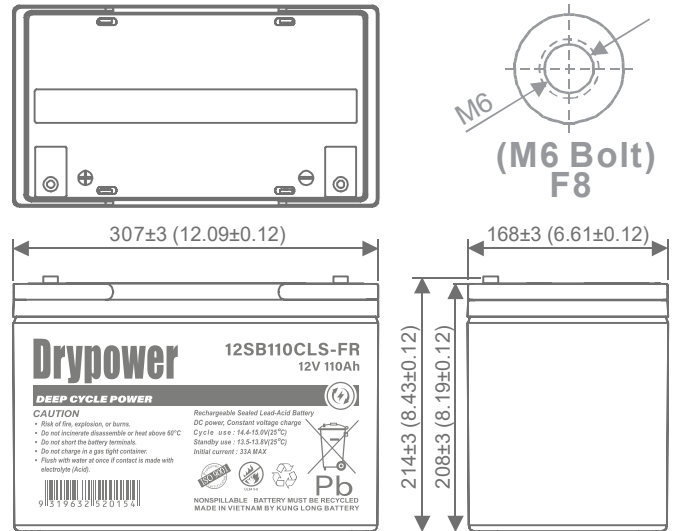


Barcode	 9319632520154
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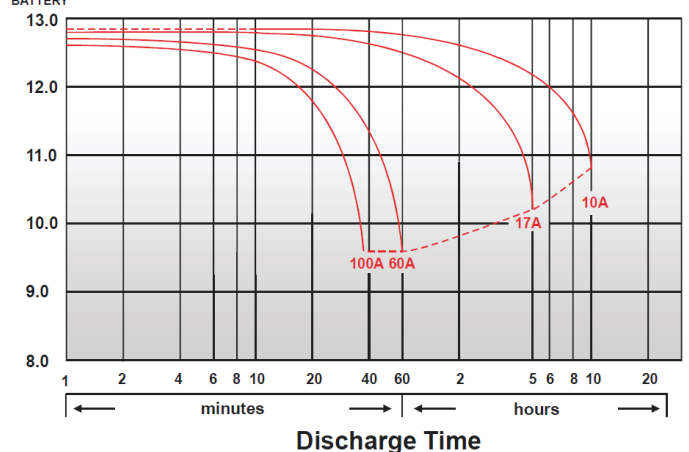


DIMENSIONS

mm (inch)

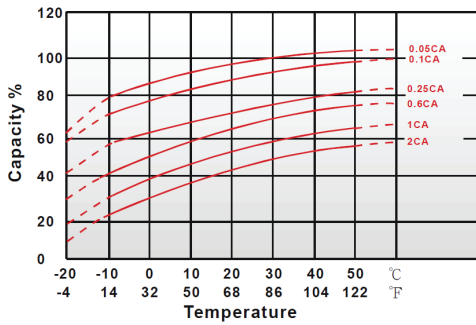


Discharge Time VS. Discharge Current (25°C)

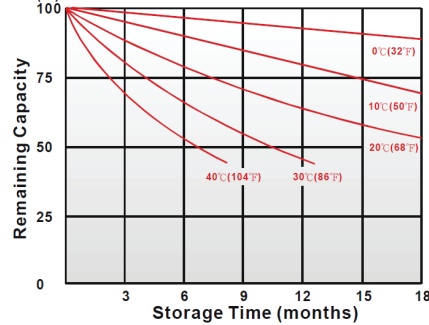


CHARACTERISTICS CHARTS

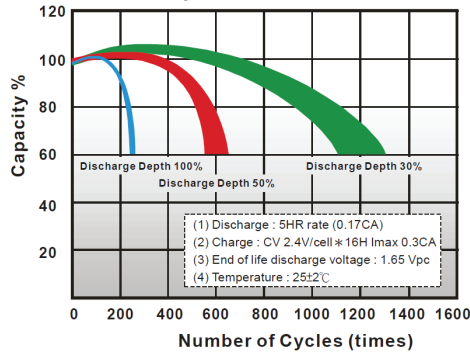
Effect of Temperature on Capacity 25°C (77°F)



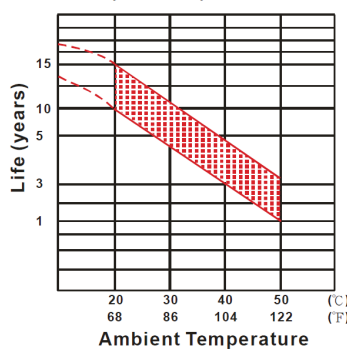
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



FEATURES & BENEFITS

- ◆ Industry leading 99.99% pure lead content for superior service life and dependable performance.
- ◆ Special grid frame alloy design with outstanding anti-corrosion performance.
- ◆ Maintenance free technology and non-spillable design.
- ◆ Suitable for use in any orientation (except inverted) for use in hard to reach locations.
- ◆ Higher percentage of tin content compared with the industry standard. Tin extends battery standby life by minimising sulphation (corrosion) especially at higher temperatures.
- ◆ 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	432	491	527	561	577	598	625
10	min	402	436	463	488	497	510	521
15	min	310	345	373	385	389	395	403
30	min	218	235	248	252	254	255	257
60	min	130	136	140	142	143	144	145
120	min	68.3	71.6	74.2	74.9	75.6	76.4	77
180	min	52.6	54.5	55.5	56.6	57.1	57.8	58.8
240	min	35.1	36.8	39.2	41.2	41.8	42.6	43.2
300	min	33.8	35	36.7	37.1	37.20	37.4	37.7
600	min	18.9	19.6	19.9	20.2	20.30	20.5	20.7
1200	min	10.3	10.6	10.9	11.1	11.2	11.3	11.4

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	236	261	300	320	341	356	375
10	min	195	218	239	256	262	271	286
15	min	174	189	202	210	213	216	221
30	min	115	123	129	132	133	134	136
60	min	63.2	65.5	67.5	69.6	70.5	71.5	73.3
120	min	36.2	37.5	38.1	38.7	38.9	39.2	39.5
180	min	27.9	28.9	29.4	29.8	30	30.2	30.4
240	min	18.40	19.2	20.1	20.3	20.4	20.5	20.7
300	min	16.8	17.6	18.4	18.6	18.7	18.8	19
600	min	9.7	10	10.2	10.4	10.5	10.6	10.7
1200	min	5.07	5.22	5.36	5.39	5.4	5.42	5.44

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.