

# Drypower

VRLA AGM CYCLIC RANGE  
**DEEP CYCLE POWER**



12V

140Ah

SLA

CYCLIC  
AGM

## 12SB140CL-FR

Rechargeable AGM Sealed Lead Acid Battery

### SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity		
20 hour rate	(6.78A to 9.60V)	135.6Ah
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
1C	(130A to 9.60V)	82.33Ah
Weight	Approx. 43.0kg	
Internal Resistance (at 1KHz)	Approx. 5mΩ	
Maximum Discharge Current (5 secs)	1300A	
Charge Methods at 25°C		
<b>Cycle Use</b>		
Charging Voltage	14.4V to 15.0V	
Coefficient	-5.0mV/°C/Cell	
Maximum Charging Current	42A	
<b>Standby Use</b>		
Float Charging Voltage	13.5V to 13.8V	
Coefficient	-3.0mV/°C/Cell	
Operating Temperature Range		
<b>Charge</b>	-15°C to 40°C	
<b>Discharge</b>	-15°C to 50°C	
<b>Storage</b>	-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:

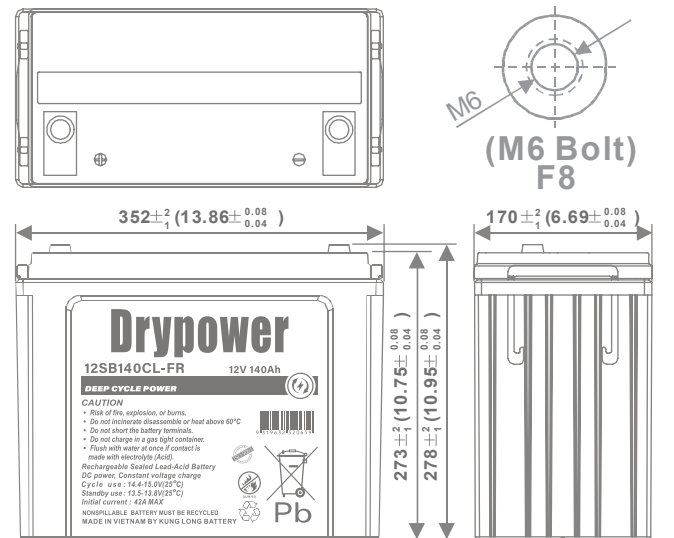
- Air (IATA/ICAO provision A67)
- Road
- Sea (per IMDG Special Provision 238)



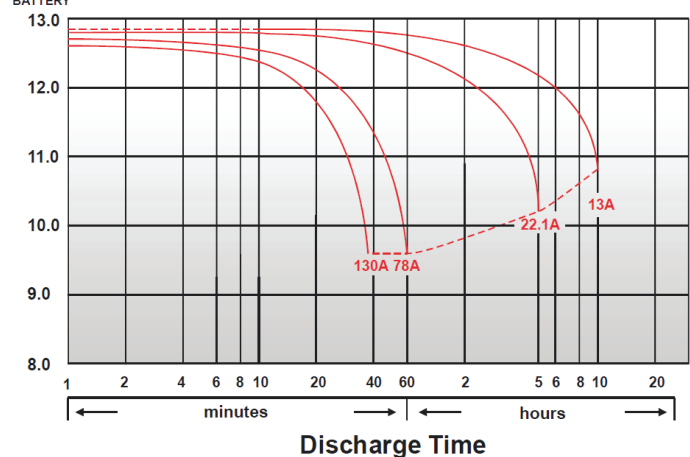
Barcode	 9319632520659
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### DIMENSIONS

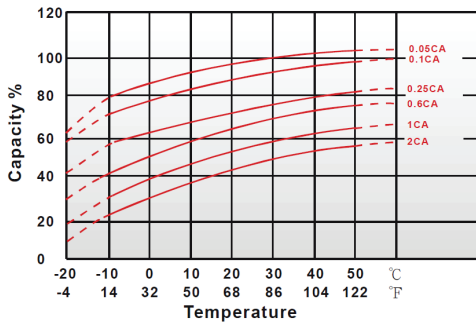


### Discharge Time VS. Discharge Current (25°C)

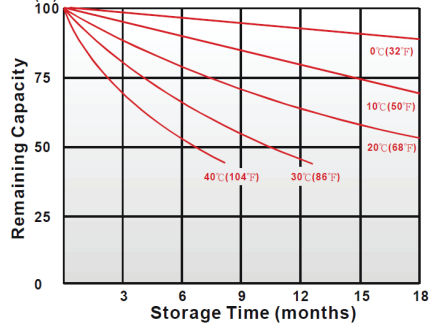


### CHARACTERISTICS CHARTS

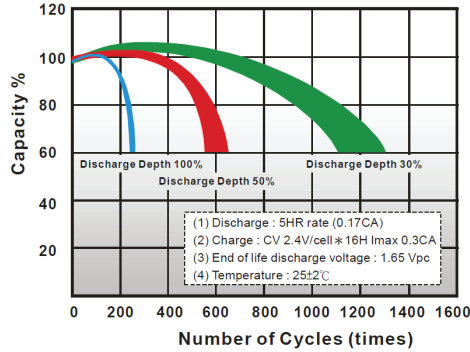
Effect of Temperature on Capacity 25°C (77°F)



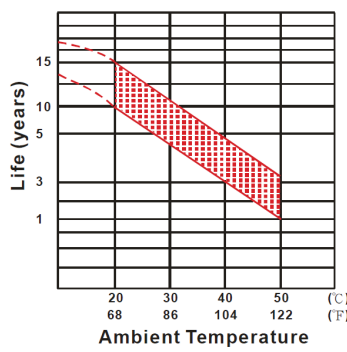
Capacity Retention Characteristic



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								
10	min	409	470	495	518	528	539	559
15	min	345	364	389	408	415	423	435
30	min	223	257	261	271	275	278	283
60	min	143	149	155	159	160	161	163
120	min	82	85.2	88.2	90.7	91.7	92.8	94.5
180	min	62.7	65	67.3	69.2	70	71	72.3
240	min	48.7	51.7	53.5	55	55.5	56.2	57.2
300	min	42.3	44.7	46.2	47.3	47.7	48.2	48.8
600	min	24.3	25.3	26	26.7	26.80	27.2	27.5
1200	min	12	12.5	12.9	13.2	13.30	13.5	13.5

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								
10	min	229	260	292	308	316	324	340
15	min	182	211	232	247	250	256	262
30	min	113	128	136	143	145	147	152
60	min	57.8	66.4	73.5	78.9	80.1	81.4	83.6
120	min	37.4	42.4	44.7	45.8	46.5	47.3	48.6
180	min	28.4	31.3	34.4	35	35.5	36.2	37.2
240	min	22.4	24.6	27.1	27.7	28	28.4	28.9
300	min	20.70	22	22.9	23.5	23.7	23.9	24.2
600	min	12	13	13.1	13.1	13.2	13.2	13.3
1200	min	6	6.5	6.57	6.63	6.7	6.74	6.78

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.