



12V

20Ah

SLA

CYCLIC  
AGM

## 12SB20C

Rechargeable AGM Sealed Lead Acid Battery

### SPECIFICATIONS

<b>Nominal Voltage</b>	12V	
<b>Nominal Capacity</b>		
20 hour rate (1.0A to 10.50V)	20Ah	
10 hour rate (1.9A to 10.50V)	19Ah	
5 hour rate (3.4A to 10.20V)	17Ah	
1C (20A to 9.60V)	11.33Ah	
3C (60A to 9.60V)	8Ah	
<b>Weight</b>	Approx. 5.95kg	
<b>Internal Resistance (at 1KHz)</b>	Approx. 10mΩ	
<b>Maximum Discharge Current (5 secs)</b>	300A	
<b>Charge Methods at 25°C</b>		
<b>Cycle Use</b>		
Charging Voltage	14.4V to 15.0V	
Coefficient -5.0mV/°C/Cell		
<b>Standby Use</b>		
Float Charging Voltage	13.5V to 13.8V	
Coefficient -3.0mV/°C/Cell		
<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>	F3 (M5 Bolts)
<b>Design Life</b>	3-5 years

**Classified as a non-spillable battery. Approved for transportation by:**

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



**Barcode**

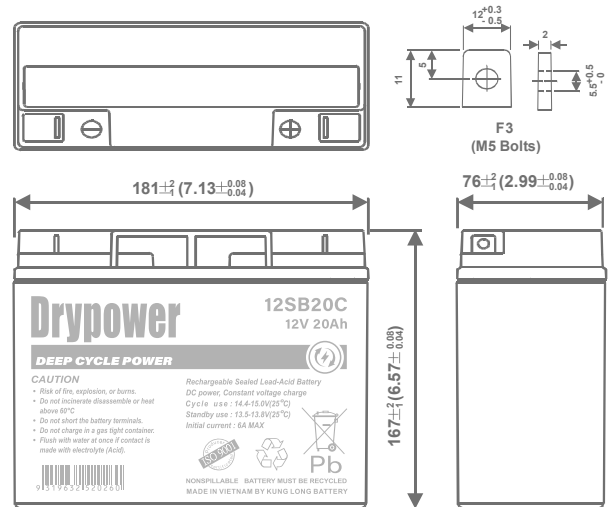


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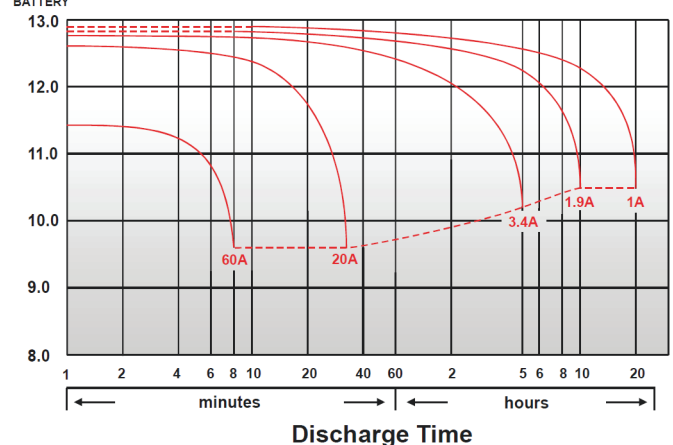


### DIMENSIONS

mm (inch)

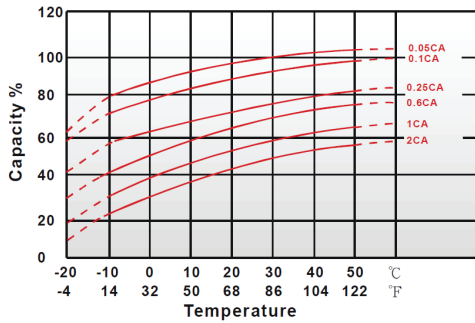


### Discharge Time VS. Discharge Current (25°C)

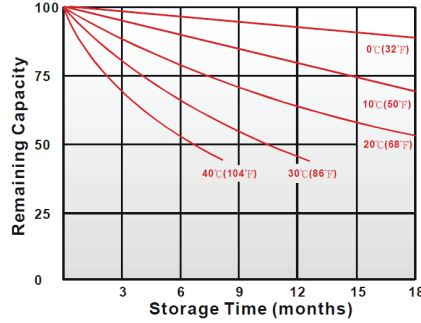


## CHARACTERISTICS CHARTS

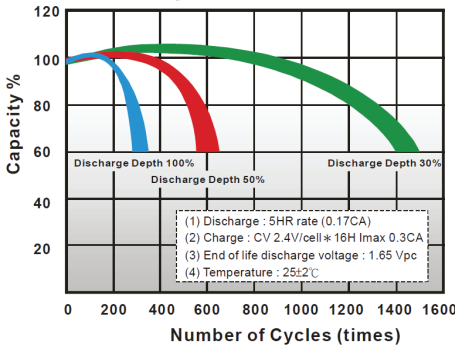
Effect of Temperature on Capacity 25°C (77°F)



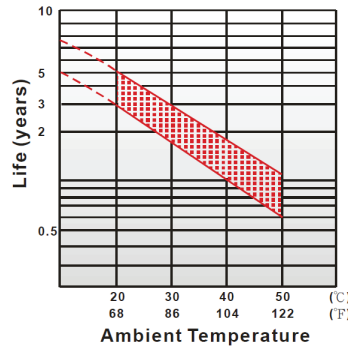
Capacity Retention Characteristic



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	108	125	136	143	145	147	149
10	min	77.1	87	94.3	98.7	99.8	101	102
15	min	64.5	72.2	78.8	81.8	82.6	83.5	84.4
30	min	34.8	37.2	39.8	41.3	41.8	42.3	42.7
60	min	22.2	23.2	24	24.7	24.8	25.2	25.5
120	min	12.2	12.7	13	13.5	13.6	13.7	13.8
180	min	9.53	9.88	10.1	10.3	10.4	10.5	10.6
240	min	7.63	7.93	8.12	8.27	8.32	8.38	8.46
300	min	6.65	6.88	7	7.1	7.13	7.18	7.24
600	min	3.87	3.98	4.07	4.13	4.15	4.19	4.22
1200	min	2.05	2.12	2.17	2.2	2.22	2.23	2.25

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	68.2	73.9	77.5	80.7	82	83.4	85.8
10	min	45.8	48.9	51.4	53.5	54.4	55.4	57
15	min	34.7	37.3	39	40.5	41.1	41.7	42.6
30	min	18.5	20	21.1	22	22.2	22.6	23.2
60	min	11.1	11.7	12.2	12.6	12.7	12.9	13.1
120	min	6.25	6.47	6.61	6.73	6.77	6.82	6.89
180	min	4.73	4.9	5	5.08	5.11	5.15	5.21
240	min	3.88	3.97	4.04	4.09	4.11	4.14	4.17
300	min	3.41	3.48	3.53	3.57	3.58	3.6	3.62
600	min	1.97	2	2.02	2.04	2.05	2.06	2.07
1200	min	1	1.03	1.05	1.07	1.08	1.09	1.1

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.