Drypower

VRLA AGM CYCLIC RANGE
DEEP CYCLE POWER

12V | **50Ah** | **SLA** | **CYCLIC AGM**

12SB50C

Rechargeable AGM Sealed Lead Acid Battery

SPECIFICATIONS

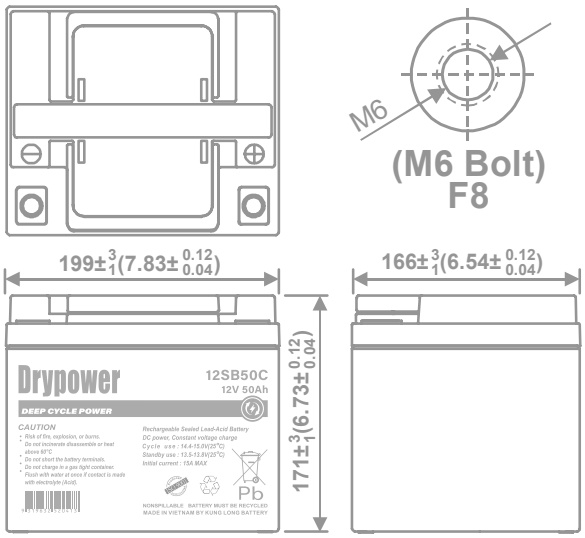
Nominal Voltage		12V
Nominal Capacity		
20 hour rate	(2.50A to 10.50V)	50Ah
10 hour rate	(4.75A to 10.50V)	47.5Ah
5 hour rate	(8.50A to 10.20V)	42.5Ah
1C	(50A to 9.60V)	28.33Ah
3C	(150A to 9.60V)	20Ah
Weight		Approx. 15.1kg
Internal Resistance (at 1KHz)		Approx. 5mΩ
Maximum Discharge Current (5 secs)		600A
Charge Methods at 25°C		
Cycle Use		
Charging Voltage Coefficient -5.0mV/°C/Cell		14.4V to 15.0V
Maximum Charging Current		15A
Standby Use		
Float Charging Voltage Coefficient -3.0mV/°C/Cell		13.5V to 13.8V
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		ABS UL94 HB
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		3-5 years

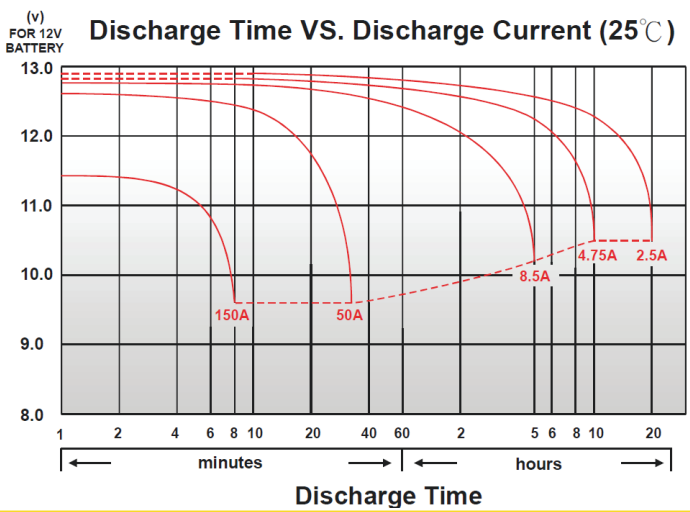
Classified as a non-spillable battery.
Approved for transportation by:
- Air (IATA/ICAO provision A67)
- Road
- Sea (per IMDG Special Provision 238)

IATA

Barcode	9319632520413

DIMENSIONS mm (inch)





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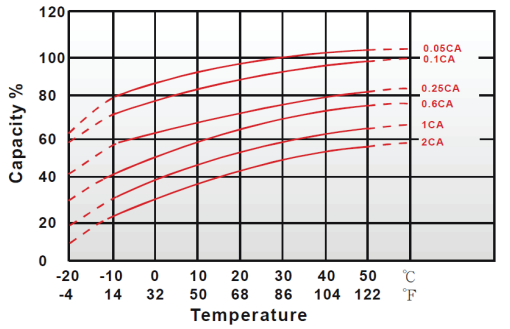
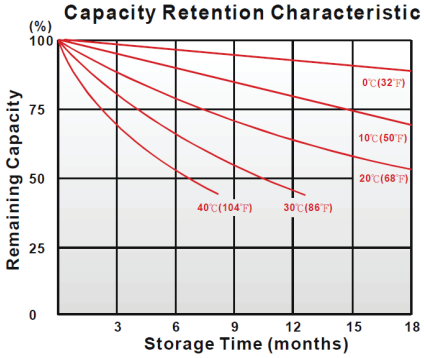
CHARACTERISTICS CHARTS

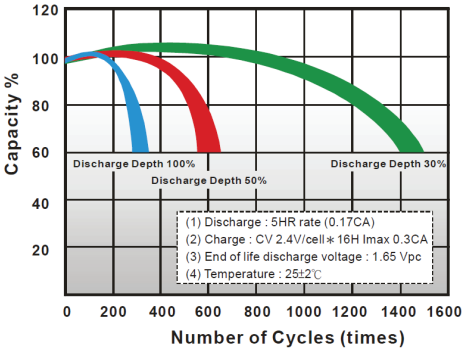
Effect of Temperature on Capacity 25℃(77℉)



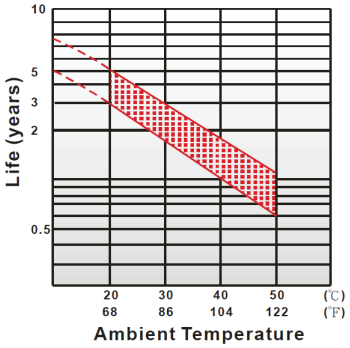
Capacity Retention Characteristic



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)

Time \ End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	235	282	316	338	343	348	354
10	min	168	199	218	228	232	237	241
15	min	124	143	157	163	166	169	171
30	min	76.4	88	95.2	98.3	99.5	101	102
60	min	52.6	55.4	57	58.3	58.8	59.5	59.9
120	min	29.2	32	33.3	34.5	34.8	35.3	35.8
180	min	20.8	22.7	23.8	24.7	25	25.3	25.7
240	min	17.2	18.3	19	19.7	19.8	20.2	20.5
300	min	15.9	16.6	17	17.3	17.50	17.7	17.8
600	min	8.62	9.1	9.38	9.57	9.62	9.68	9.77
1200	min	4.58	4.87	5.05	5.17	5.2	5.25	5.3

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

Time \ End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	136	163	181	195	202	206	210
10	min	86.7	104	115	123	125	128	131
15	min	76.2	82.8	85.8	88.4	89.1	90	91
30	min	44.5	49.7	51.7	53.3	53.8	54.4	55.1
60	min	25.5	28.2	29.3	30	30.2	30.5	30.8
120	min	15.1	16.2	16.8	17.3	17.5	17.7	17.9
180	min	11	11.7	12.1	12.4	12.5	12.6	12.7
240	min	8.96	9.44	9.7	9.89	9.96	10.1	10.2
300	min	7.85	8.26	8.5	8.67	8.73	8.8	8.87
600	min	4.41	4.65	4.76	4.82	4.84	4.87	4.91
1200	min	2.32	2.44	2.5	2.55	2.57	2.59	2.61

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.