



2V

80Ah

SLA

AGM

2SB80HP-FR

Rechargeable AGM Sealed Lead Acid Battery

SPECIFICATIONS

Nominal Voltage	2V	
Nominal Capacity		
20 hour rate (4.0A to 1.75V)	80Ah	
10 hour rate (7.5A to 1.80V)	75Ah	
5 hour rate (12.75A to 1.70V)	63.75Ah	
1 hour rate (45A to 1.60V)	45Ah	
1C (75A to 1.60V)	37.5Ah	
Weight	Approx. 6.4kg	
Internal Resistance (at 1KHz)	Approx. 1.5mΩ	
Maximum Discharge Current (5 secs)	450A	
Charge Methods at 25°C		
Cycle Use		
Charging Voltage	2.4V to 2.5V	
Coefficient	-5.0mV/°C/Cell	
Maximum Charging Current	24A	
Standby Use		
Float Charging Voltage	2.25V to 2.3V	
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	F18 (M8 Bolt)

Description of Torque Value of Hardware for the Terminals

Recommended Torque Value	M8: 12 N-m (122kgf-cm)
Max. Allowable Torque Value	M8: 15 N-m (153kgf-cm)

Design Life	12-15 Years (at 20°C)
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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



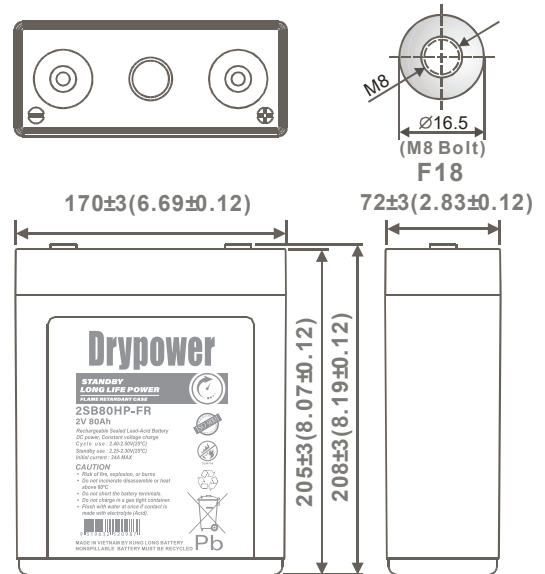
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UL94 V-0
FLAME RETARDANT
CASE

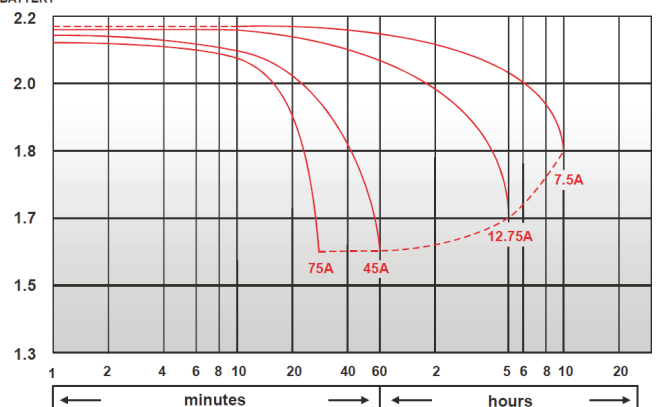
DIMENSIONS

mm (inch)



(V)
FOR 2V
BATTERY

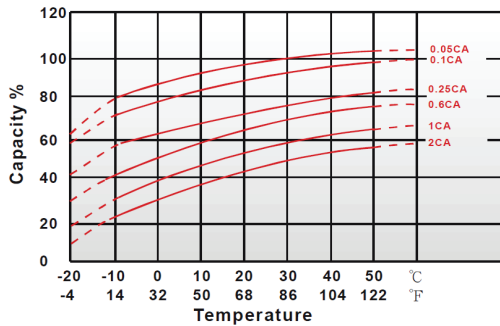
Discharge Time VS. Discharge Current (25°C)



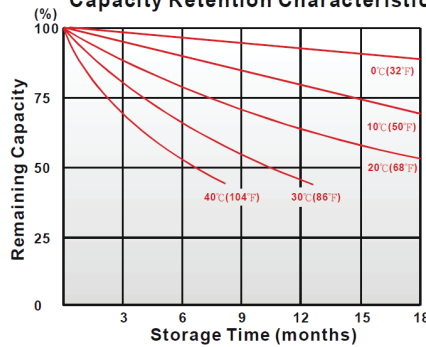
Discharge Time

CHARACTERISTICS CHARTS

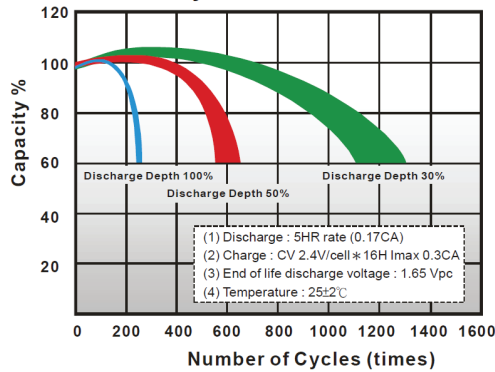
Effect of Temperature on Capacity 25°C (77°F)



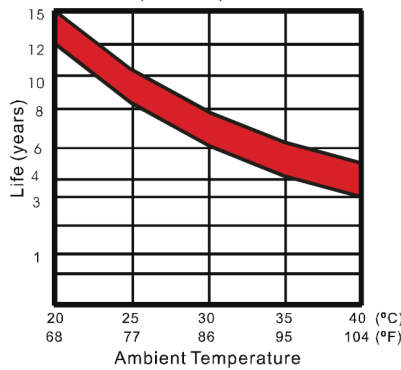
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



FEATURES & BENEFITS

- ◆ Industry leading 99.99% pure lead content for superior service life and dependable performance.
- ◆ 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.



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	1.65V	1.60V
Time	min						
20	min	119	134	147	157	165	173
30	min	109	123	132	139	145	148
60	min	74.2	80.6	83.6	85.8	88.6	90.6
120	min	45.1	48.1	50.9	53.1	55	56.5
180	min	35	37.2	39.1	40.9	42.2	43.4
240	min	29.3	31.4	32.7	33.8	34.9	35.9
300	min	24	25.3	26.4	27.6	28.5	29.3
360	min	21	22.2	23	23.8	24.5	25.3
480	min	16.3	17.2	17.9	18.5	19	19.6
600	min	14.4	15	15.5	16	16.4	16.7
1200	min	7.42	7.79	8.12	8.44	8.75	8.9

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.65V	1.60V
Time	min						
20	min	70.9	78.5	84.7	89.3	92.7	95.4
30	min	61.6	66.2	69.8	72.2	74.3	76
60	min	35.7	39.4	42.8	44.7	46.4	47.5
120	min	22.1	24.2	25.9	27.2	28.2	29
180	min	16.2	17.8	19.1	20.1	20.9	21.5
240	min	13.3	14.4	15.3	16.1	16.7	17.1
300	min	11.8	12.7	13.3	13.8	14.1	14.4
360	min	10.90	11.5	11.9	12.2	12.4	12.6
480	min	8.59	8.97	9.29	9.48	9.65	9.78
600	min	7.31	7.55	7.74	7.91	8.03	8.12
1200	min	3.69	3.84	3.96	4.08	4.17	4.23

All data on the spec. sheet is an average value:

The tolerance range : $X < 6\text{min}$ (+15%~-15%), $6\text{min} \leq X < 10\text{min}$ (+12%~-12%), $10\text{min} \leq X < 60\text{min}$ (+8%~-8%), $X \geq 60\text{min}$ (+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.