



2V

80Ah

SLA

AGM

## 2SB80HP-FR

Rechargeable AGM Sealed Lead Acid Battery

### SPECIFICATIONS

<b>Nominal Voltage</b>	2V	
<b>Nominal Capacity</b>	80Ah	
<b>20 hour rate</b> (4.0A to 1.75V)	80Ah	
<b>10 hour rate</b> (7.5A to 1.80V)	75Ah	
<b>5 hour rate</b> (12.75A to 1.70V)	63.75Ah	
<b>1 hour rate</b> (45A to 1.60V)	45Ah	
<b>1C</b> (75A to 1.60V)	37.5Ah	
<b>Weight</b>	Approx. 6.4kg	
<b>Internal Resistance</b> (at 1KHz)	Approx. 1.5mΩ	
<b>Maximum Discharge Current</b> (5 secs)	450A	
<b>Charge Methods at 25°C</b>		
<b>Cycle Use</b>		
Charging Voltage	2.4V to 2.5V	
Coefficient	-5.0mV/°C/Cell	
Maximum Charging Current	24A	
<b>Standby Use</b>		
Float Charging Voltage	2.25V to 2.3V	
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>		
<b>1 month</b>	98%	
<b>3 months</b>	94%	
<b>6 months</b>	85%	

<b>Case Material</b>	UL94 V-0 Flame Retardant
<b>Termination</b>	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)

<b>Design Life</b>	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



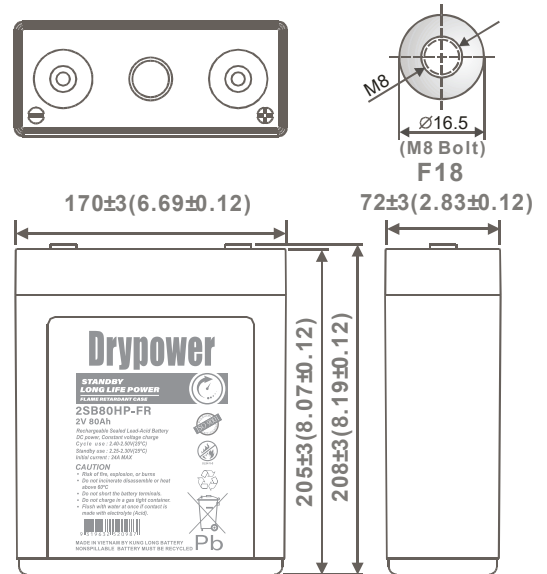
9319632520987



UL94 V-0  
FLAME RETARDANT  
CASE

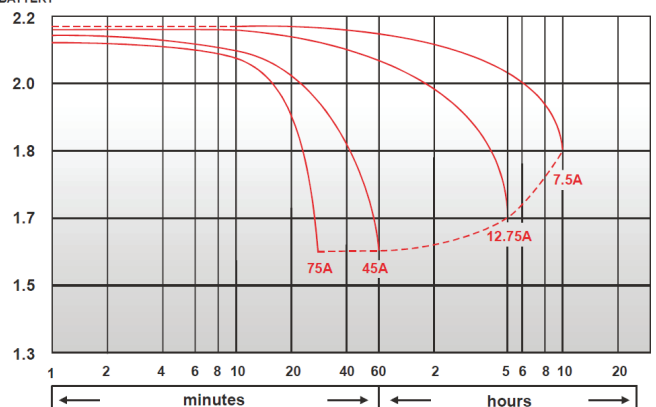
### DIMENSIONS

mm (inch)



(V)  
FOR 2V  
BATTERY

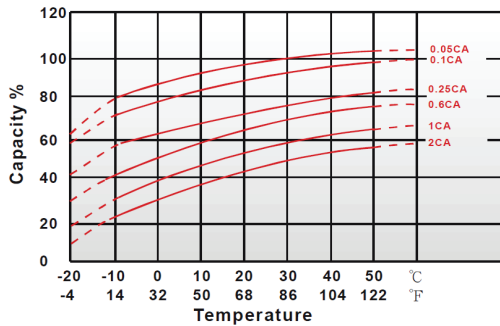
#### Discharge Time VS. Discharge Current (25°C)



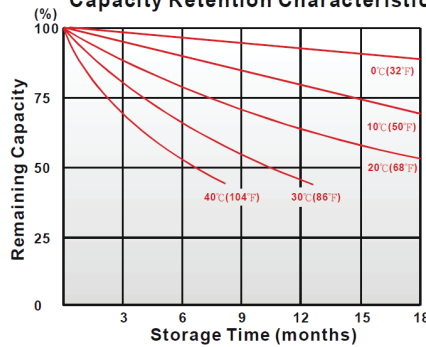
Discharge Time

### CHARACTERISTICS CHARTS

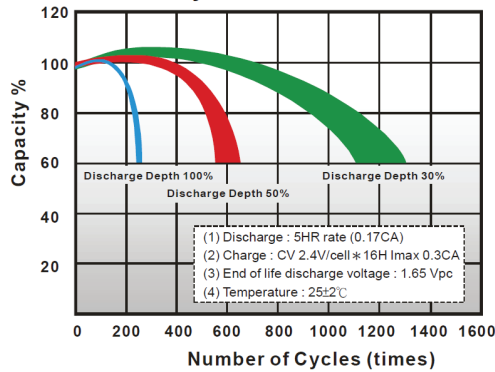
Effect of Temperature on Capacity 25°C (77°F)



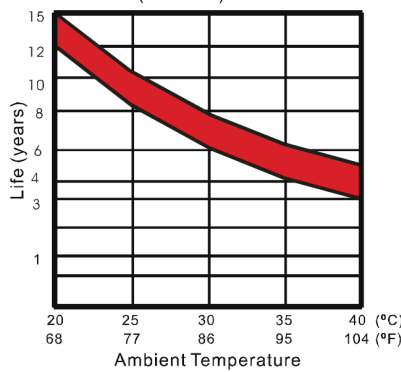
Capacity Retention Characteristic



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							
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							
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.