



12V

100W

SLA

UPS
AGM

12SB100WHR-FR

Rechargeable AGM Sealed Lead Acid Battery

SPECIFICATIONS

Nominal Voltage	12V	
Nominal Power	15 min rate	
	15 min rate	100W/cell to 1.67V/cell
Nominal Capacity		
	20 hour rate	(1.40A to 10.50V) 28Ah
	8 hour rate	(3.36A to 10.50V) 26.9Ah
	5 hour rate	(4.76A to 10.20V) 23.8Ah
Weight	Approx. 9.6kg	
Internal Resistance (at 1KHz)	Approx. 9.2mΩ	
Maximum Discharge Current (5 secs)	420A	
Short Circuit Current	1500A	
Charge Methods at 25°C		
	Maximum Charging Current	8.4A
	Boost Charging Voltage	14.4V to 15.0V
	Boost Charge Time	8-9 hrs
	Float Charging Voltage	13.5V to 13.8V
	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	96%
	6 months	94%
Case Material	UL94 V-0 Flame Retardant	
Termination	F6 (M5 Bolt)	

Torque Value of Terminal Hardware

Recommended Torque Value M5: 4 N-m (41kgf-cm)
Max. Allowable Torque Value M5: 6 N-m (61kgf-cm)

Design Life

6-9 years

Classified as a non-spillable battery.

Approved for transportation by:

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



Barcode



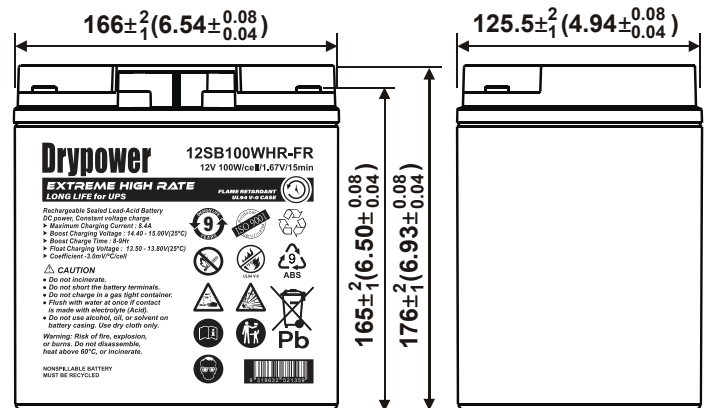
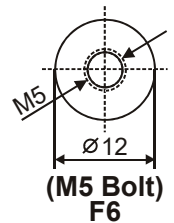
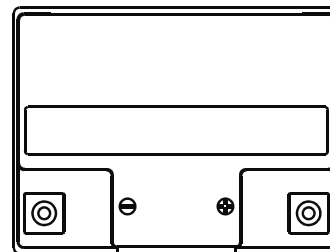
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UL94 V-0
FLAME RETARDANT
CASE

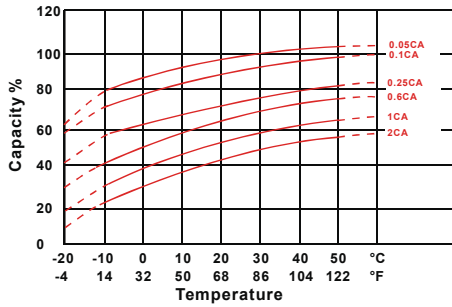
DIMENSIONS

mm (inch)

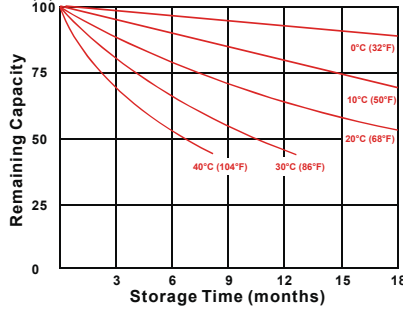


CHARACTERISTICS CHARTS

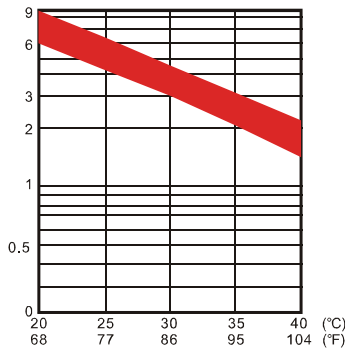
Effect of Temperature on Capacity 25°C (77°F)



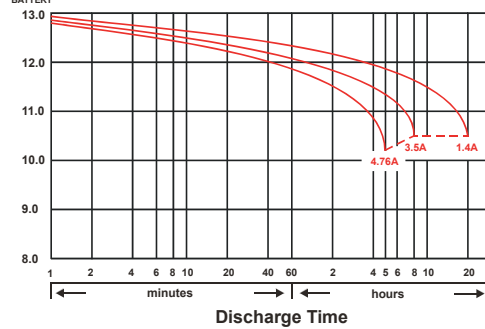
Capacity Retention Characteristic



Trickle (or float) Service Life



Discharge Time VS. Discharge Current (25°C)



FEATURES & BENEFITS

- ◆ Industry leading 99.99% pure lead content for superior service life and dependable performance.
- ◆ Specially formulated solder paste to ensure reliable power delivery.
- ◆ Maintenance free technology and non-spillable design.
- ◆ Special grid frame alloy design with outstanding anti-corrosion performance.
- ◆ 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
2	min	181	210	234	245	255	264	273
4	min	157	172	186	199	211	221	231
5	min	139	161	179	186	191	196	200
6	min	130	156	166	173	180	185	190
8	min	125	139	145	150	155	160	165
10	min	107	118	124	128	133	135	137
15	min	86.4	94.7	102	104	106	108	110
20	min	76.6	82.3	83.4	84.3	85.1	85.9	86.7
30	min	54.4	58.7	59.9	60.7	61.4	62.1	62.8
45	min	45.4	48.5	49.4	49.9	50.3	50.6	50.9
60	min	35	36.5	36.9	37.2	37.5	37.8	38.2
90	min	25	25.9	26.5	26.9	27.3	27.5	27.7
120	min	21	21.9	22.3	22.5	22.6	22.8	23
180	min	15.5	16.2	16.4	16.6	16.7	16.8	16.9
240	min	11.9	12.4	12.7	12.8	12.9	13	13.1
300	min	10	10.4	10.5	10.6	10.7	10.8	10.9
600	min	5.56	5.72	5.85	5.86	5.88	5.89	5.91
1200	min	3	3.03	3.09	3.11	3.12	3.14	3.15

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
2	min	92.5	115	133	148	158	167	172
4	min	80.5	96.5	109	114	119	124	128
5	min	72.5	88	102	107	112	116	119
6	min	70.8	83.8	90.5	96.9	103	108	113
8	min	68.3	75.3	81.6	85.4	88.4	90.6	92.6
10	min	57.1	63.9	66.2	69.6	72.4	75.2	77.7
15	min	44.6	49	52.7	54.6	56.1	57.6	58.6
20	min	35.70	39.2	42.1	43.7	44.9	46.1	46.9
30	min	27.8	29.9	31	31.9	32.6	33.2	33.4
45	min	21.1	22.6	23	24.2	24.7	24.9	25.1
60	min	16.3	17.4	18.1	18.6	19.1	19.3	19.4
90	min	12.6	13.6	14	14.4	14.7	15	15.2
120	min	10.6	11.3	11.5	11.8	11.9	12.2	12.3
180	min	7.39	7.69	7.94	8.05	8.18	8.35	8.38
240	min	5.97	6.09	6.23	6.34	6.41	6.48	6.51
300	min	4.95	5.08	5.19	5.33	5.38	5.42	5.45
600	min	2.74	2.82	2.91	2.93	2.95	2.97	2.98
1200	min	1.45	1.48	1.51	1.53	1.54	1.55	1.56

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%)

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. Dec2023